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Limits of Legal Evolution
Knowledge and Normativity in Theories of Legal
Change

Liam McHugh-Russell

Thesis submitted for assessment with a view to obtaining
the degree of Doctor of Laws of the European University Institute

Florence, 13 June 2019

European University Institute
Department of Law

Limits of Legal Evolution

Knowledge and Normativity in Theories of Legal Change

Liam McHugh-Russell

Thesis submitted for assessment with a view to obtaining
the degree of Doctor of Laws of the European University Institute

Examining Board

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Professor Claire Kilpatrick, European University Institute

Professor Peer Zumbansen, Osgoode Hall Law School

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Department of Law – LL.M. and Ph.D. Programmes**

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May 26, 2019

Abstract

Over the last forty years, legal theory and policy advice have come to draw heavily from an ‘evolutionary’ jurisprudence that explains legal transformation by drawing inspiration from the theoretical successes of Darwinian natural selection. This project seeks to enrich and critique this tradition using an analytical perspective that emphasizes the material consequences of concepts and ideas. Existing theories of legal evolution depend on a positivist epistemology that strictly distinguishes the objects of social life—interests, institutions, systems—from knowledge about those objects. My dissertation explores how knowledge, and especially non-legal expertise, acts as an independent site and locus of transformation, mediating the interaction between law and social phenomena and acting as a catalyst of legal innovation. Prior work by Simon Deakin has integrated insights from systems theory to show how the interaction between law and economic institutions can only be properly understood by attending to the epistemic frame law uses to interpret economic practice. Using a case study on the impact of ‘law and finance’ literature on World Bank policy advice and, consequentially, on legal reforms adopted by many developing countries between 2000 and the present, I show that such attention to legal knowledge is inadequate. The case points, first, to the contingency of the intellectual tools used to understand legal institutions. Rather than deploying a determinate rationality, private and public actors address legal, economic, and ethical problems using a variety of paradigms: viewpoints are not determined by realities. More fundamentally, the cases suggest that successful paradigms, rather than economic or political realities alone, shape the dynamics of socio-legal change. My conclusions address some normative questions that arise when researchers in a social scientific mode are implicated in the processes they seek to document.

Acknowledgements

Preferatory remarks like these are usually framed as an expression of gratitude to those who have helped carry out a research project and, as a consequence, offer an indicator of what made that project possible. Producing a scholarly text of this scope and detail depends upon a thick grid of social and material ties. If anything of value appears in these pages (and I think it does), it has not been produced through my efforts alone. Thanks are due. Given the fraught circumstance faced today by researchers in the humanities, however, it is also appropriate, in the spirit of Woolf's *A Room of One's Own*, to be explicit about the conditions under which that value could be produced.

The European University Institute (EUI) is a truly unparalleled setting to do a doctorate. The EUI offers a rich environment to test ideas, engage across disciplinary boundaries, and develop one's thinking, as well as fostering a community that strongly supports the scholarly ambitions of all researchers. During my time at the EUI, I learned a great deal from seminars with Dennis Patterson, Dirk Moses, Giorgio Monti, Sofie Moeller, Nehal Bhuta, Matthew Hoyer, Tobias Kelly, Simon Deakin, Youssef Cassis, László Bruszt, David Trubek, and Claire Kilpatrick. In two Private Law doctoral workshops organized by Hans Micklitz and Stefan Grundmann, I received constructive feedback from many participants, notably Yane Svetiev. Ola Innset and Julia Rone were tireless collaborators in planning and delivering the agenda of our neoliberalism working group. I was gratified by the enthusiastic and substantial contributions of participants in that group as well as those of an informal reading group on actor network theory and Latour. And this is all beside my access to an at-times overwhelming menu of lectures, symposia, colloquia, and seminars to nourish my work.

Researchers at the EUI are not only welcomed as colleagues and fully integrated into the intellectual community, they are also afforded resources that make a real difference to the completion of their own work. First and foremost, the EUI provides the space, time, and material support for researchers to *actually write* when the time comes. Where the library did not have a source I needed access to, it was fast made available. ICT Services maintains computers, scanners and printers, online resources, and audio-visual tools that, for the most part, simply work. Problems that do arise, whether with these technologies or with other aspects of the workspace, are quickly addressed. The mensa

offers a healthy menu of subsidized meals to researchers that significantly increases the EUI's value as a workspace. Multiple departments and professors provided funding for research-related conferences and workshops that I helped to organize. Institutional support for these events also included the critical contribution of administrative staff, who treated our projects with the same attention and professionalism they provide to faculty. For their competence, kindness, and expertise, I want to especially note the contribution of Laura Borgese, Alina Vlad, Ana Dicu, Claudia De Concini, and Eleanora Masella.

The easy-to-miss cornerstone of my doctorate was having the opportunity to do it at all. During five years of research and writing, I received generous doctoral grants from the EUI law department and the Social Sciences and Humanities Research Council of Canada. The law department took a chance in offering me a rare spot in the doctoral program available to 'non-European' candidates. I hope that I have risen to their expectations.

Beyond the EUI, Harvard's Institute for Global Law and Policy funded my participation in both a writing workshop and a conference in 2015, which offered a context to discuss an early version of chapter 5 with a sharp, like-minded audience, and connected me to a deep, diverse, and thoughtful network of interlocutors too numerous to name here. I also received crucial feedback on chapter 5 from participants in a writing workshop hosted by Siobhan Airey and Mark Toufayan at the University of Ottawa in winter 2017. The Labour Law and Development Research Lab provided an office in Montreal, bridge funding, and an engaged community of students and scholars during extensive revisions to the dissertation in the winter of 2019. Emily Painter, in particular, made for an ideal office-mate. I have been long been impressed by the mentorship, warmth, and support that the Lab's founder, Adelle Blackett, extends to her junior colleagues, but I was still overwhelmed by her generosity in the last few months. I should also acknowledge that the Trudeau Foundation and the Canada Research Chairs program made it possible for her to extend this support to me.

I had productive conversations about aspects of this project with Nicola Hargreaves, Alberto Horst-Neidhardt, Ryan Griffiths, Ida Koivisto, Zeynep Koçak-Şimşek, Heidi Matthews, Leon Castellanos Jankiewicz, Heikki Marjosola, Umut Özsü, Joanna Langille, Elizabeth McAllister, John Haskell, Pascal Macdougall, Robert Wai, Peter Szigeti, Iagé Imola, Merritt Fox, Jotte Mulder, Liam Campling, Trevor Young-Hyman, Andrew Lang, Jen

Raso, Ola Insett, Julia Rone, Przemelsaw Palka, Machteld Nijsten, Anna Chadwick, Magda Malecka, Nicolas Perrone, Siobhan Airey, Dan Danielsen, Peter Sand Henriksen, Robert Lepenies, and numerous others who, beyond thanks, deserve apologies for not getting mentioned by name. Kerry Rittich, who has long incited insight (and inspired some needed humility) during my development as a legal scholar, fruitfully suggested early on that I connect my lines of inquiry to critiques of expertise, and reminded me at another key moment not to lose sight of law's place in my analyses. Fabrizio Esposito forced me to admit that I was undertaking a project in the sociology of knowledge, and would have to engage with that literature to succeed. Fleur Johns engaged generously with the project, and flagged the risk when doing historical research of reifying a given story of what happened rather than demonstrating its contingencies and lacunae. David Trubek pressed me on the challenges of doing credible empirical research. Emma Nyhan devised the idea for the two of us to deliver a survey course on law and society. On top of her infectious enthusiasm, teaching that class with her significantly sharpened my own knowledge of the field.

Michael Leach did extensive, indispensable editing of an early draft. A number of people did essential proofreading in the final stages of preparing the manuscript: Genevieve Painter, Stephanie Bell, Delphine Lourtau, Michael Bate, Sheila Petzold, Trevor Young-Hyman, Kevin Russell, Margaret McHugh, Jess Bate, Ryan Griffiths, Colin Lennard-White, Uros Zver, Miranda Richmond Mouillot, Eric George, Dimitri Van Den Meersche, Zoe Adams, Sean Geobey, and Tobias Smith. Many of these people offered less enumerable forms of support, as did Uros Zver, Noelle Richardson, Agnieszka Smolenska, Stephanie Lämmert, Andy Wright, Rutger Birnie, Gemma Fenton, Abril Novoa, Alexandra Hupt, Kinanya Pijl, Alexandra Ortolja-Baird, Jan Zglinski, Linh Nguyen, and members of the EUI rowing team.

It was a risky step on my part to follow up six years of studying and practicing labour law with a doctoral project focused on law's role at the intersection of finance and the firm. By agreeing to act as my supervisor, Stefan Grundmann also took on part of that risk. We share only a few theoretical, methodological, and functional commitments. In embarking on a project to critique some key modes of conceptualizing the relationship between law, the firm, and the broader economy, I hoped that having an interlocutor steeped in those traditions would sharpen my analyses. My expectations were far from disappointed. Not

only did his deep and broad expertise force me to confront law-and-economics arguments on their own terms, but our interactions helped me develop a richer appreciation of the Law & Finance literature and the complexity of its underpinnings. I learned much from my time with him. On the other hand, the mutations and *evolutions* that my dissertation project has undergone since it began are evidence of how insecure its original footings were: my initial intent was to address the political economy of finance and production in the informal sector, and I knew next to nothing about Law & Finance. Both his choice to take me on as a supervisee and his forbearance and steadfastness during the project's tribulations serve as testaments to his truly ecumenical appreciation of theoretically rich, inter-disciplinary research. For standing with me from start to finish, I owe him thanks.

One of the high points of this project was receiving the reports from the members of my examining board, Simon Deakin, Peer Zumbansen, and Claire Kilpatrick. I was gratified to have such meaningful engagement with the dissertation's arguments and took important lessons away from my confrontation with their disagreements and criticisms. Claire, in addition, was a key interlocutor and mentor during the highs and lows of my doctorate.

Universities have long subsisted on the un- or under-credited contributions made by spouses, directly, to the production of scholarship and, indirectly, to the maintenance of scholars. Today's expectation that junior academics will be internationally mobile as they chase professional opportunities only aggravates the dilemma inherent in this institutional bias: academic excellence, or an equitable family life. Factors both institutional and personal have allowed me to mostly avoid that dilemma. My partner, Jessica Bate, has provided immeasurable forms of encouragement, forbearance, and care in the years that this project has taken. Though we have tried to cultivate an equal partnership, the reality is that coming to Italy for five years meant prioritizing my professional goals. Her ability to work in Europe, and to find a position in her field in Florence, provided stability which allowed me to stay at the EUI during the whole tenure of my research. In the final stretch, Jess also took on a larger portion of our shared responsibilities, including taking two months off of work as I raced to finish. I owe her a great debt. I do not know if I could have done the doctorate without her.

My daughter Norah was born just about two years before the final version of my dissertation was submitted. Her contribution to the completion of the project was, to put

it mildly, indirect. The EUI's affordable, convenient crèche was an indispensable resource as I struggled to bring the dissertation together. Simply put, it meant that I did not have to choose between being a parent and completing a PhD. The competence, professionalism—and real affection—shown by Annalisa Ceseri, Emanuela Corradossi, Cristiana Marcucci and other crèche staff allowed me to spend each day writing in the confidence that Norah was in good hands. Without the crèche, and additional childcare provided by Magnolia Belen Rivera, Diana Lorena Rendon, Konner Russell and a wide network of friends and family in Florence and Montreal, the dissertation may never have been completed.

The most important and hardest to quantify factor in the crafting of this project has been my collaboration with Genevieve Painter. The value that our relationship has contributed to the dissertation defies neat categorization. Formally, we structured our roles as one of mutual accountability. Our work does not address the same subject matter, and we seldom work in the same disciplinary idiom. She is simply someone who knew what I was working on every week, and vice versa. We have nonetheless communicated with each other almost every workday, in one medium or another, since I started my doctorate. Together, we have nurtured a shared fascination with language and its connection to the world, as well as an appetite for rigorous scholarship and a concern about its political stakes. That sense of shared endeavour has given me the space to write in a register of rough ideas poorly expressed, shortcutting fears that lie at the root of writer's block. Much of this dissertation began as an email to Genevieve setting out what I wanted to say. The writing is also deeply inflected with her unremitting commitment to clear expression. Without her influence, many more of my sentences would be tangled forests of subclauses, sub-subclauses, parentheticals, and superfluous adjectives. Above all, however, I persevered in the project because I consistently had someone holding the other end of the rope. To Genevieve, beyond 'thank you,' I can say: 'we did it.'

Besides those who I have failed to name, I try not to forget the anonymous multitude who have indirectly supported the production of this research. Modern academic citation ensures that the predecessors who set down the intellectual foundations of a research project get their due; those who have built and maintain the world which makes it possible to actually do such work languish in obscurity. It is a world-historically rare privilege to make a living at reading, writing, and working through knotty intellectual

puzzles. I am afforded that privilege by those who grew the food I have eaten, built the tools I have used, and worked to maintain the places I have lived; and by the fragile systems that connect us to one another. So let me close with my gratitude to them.

LMR, May 2019, Montreal

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Introduction

'To an imagination of any scope the most far-reaching form of power is not money, it is the command of ideas.'

—*Oliver Wendell Holmes (1897)*¹

'Law is a scavenger. It grows by feeding on ideas from outside, not by inventing new ones of its own.'

—*Donald Elliot (1985)*²

How does law change? Simple: the law changes when an appeal court revisits a contentious doctrine, or when a regulator publishes a new rule, or when new legislation comes into force, or when a constitution is successfully amended. Actually, this answer is beyond simple. Once one adopts a certain conception of law, it becomes tautological.³

Legal scholars have long been dissatisfied with this answer. Any effort to account for processes of legal change, regardless of object or methodology, demands some attention to events of this kind. But the answer may still miss something. Might the significance and connotations of legal concepts shift over time to accommodate alterations, additions, and subtractions from the body of rules that rely on them? Might the gradual accumulation of these conceptual transformations eventually become an independent source of legal change? Can we really be so confident that, in the face of significant social changes, law remains steadfast until the moment that a legislature, court, or regulator pronounces a

¹ Oliver Wendell Holmes, 'The Path of the Law [1897]' (1997) 110 Harv L Rev 991.

² E Donald Elliott, 'The Evolutionary Tradition in Jurisprudence' (1985) 85 Colum L Rev 38, 38.

³ The idea that law is delimited by the commands of the sovereign is often identified with the nineteenth-century legal theorist John Austin. John Austin, *The Province of Jurisprudence Determined* (Wilfrid E Rumble ed, Cambridge University Press 1995). The idea is traceable at least as far back as Hobbes: 'The law of such a society thus consisted of the commands of whoever was sovereign in that society. If law is the product of the human will, the process of legal change is simple. The sovereign decides to issue a new rule to replace the old rule; he has changed his mind.' Peter Stein, *Legal Evolution: The Story of an Idea* (Cambridge University Press 1980) 2. The modern inheritor of this strain of thinking about law, at least in the Anglo-American legal tradition, is HLA Hart. Hart's account of law is richer than Austin's. He does not traffic in the fiction that valid law can be identified with the will of a sovereign. He does nonetheless identify law with valid norms issued by a state-backed law-making authority, from which it follows that changes to law are definable as changes to those norms. Hart's seminal contribution to the positivist tradition is HLA Hart, *The Concept of Law* (Clarendon Press 1972).

new rule or amends a preexisting one?⁴ If there is a change in the justification for a doctrine or procedure, but not in the doctrine or procedure itself, has there been a change in the law?⁵ Does the publication of an influential volume of doctrine by a highly-regarded professor change the law, or does the law change only when an interpretation expressed in that volume is adopted by a court? How does law change in settings in which custom is much more prominent than the law adjudicated by the courts, or contexts in which courts play a minimal role?⁶ Those who take a more ecumenical view of what counts as law will argue that an account of legal change focused on valid rules omits much that strict legal positivists would ignore, or that the positivists would at best admit as relevant yet not describe as *legal* change.

Frustrations with the minimalist account of legal change, however, need not arise from disagreements over fundamental questions of legal theory. Those who seek to describe or explain legal change are generally seeking more than just a standard by which to measure *whether* law has changed. Their inquiry into *how* law changes is often much nearer to the question of *why* law changes.⁷ Even those who imagine law as an ascertainable body of rules flowing from the pens of a determinate body of authorized law-makers may ask, 'what shapes the output of the law-maker?'⁸ Courts implicitly pursue such a line of inquiry all the time whenever they invoke the purported 'intention of the legislator' as an interpretive aid in the application of a given statutory provision or regulatory regime.⁹

⁴ Consider Holmes' famous dissent in *Lochner v New York* 198 US 45 (United States Supreme Court 1905). Does any part of the dissent currently form part of the law of the United States today? Was it part of the law before *Lochner* was substantively overturned in *West Coast Hotel Co v Parrish* 300 US 379 (United States Supreme Court 1937)?

⁵ Ellen E Sward, 'Justification and Doctrinal Evolution' (2004–05) 37 Conn L Rev 389, 390.

⁶ Relevant themes for such contexts include 'custom,' 'legal pluralism,' and 'soft law.' Jeremy Webber, 'The Grammar of Customary Law' (2009) 54 McGill LJ 579; Harry W Arthurs, 'Understanding Labour Law: The Debate Over "Industrial Pluralism"' (1985) 38 Current Legal Problems 83; Sally Engle Merry, 'Legal Pluralism' (1988) 22 Law & Society Review 869; Sally Falk Moore, 'Law and Social Change: The Semi-Autonomous Social Field as an Appropriate Subject of Study' (1973) 7 Law & Society Review 719.

⁷ The legal positivism of someone like Austin '...helps to explain the working of the machinery by which the legislative power puts the rules decreed into operation ... It does not solve the problems of the origin of legal rules.' Paul Vinogradoff, *Outlines of Historical Jurisprudence* (Oxford University Press 1920) vol 1, 123.

⁸ For positivists in the mould of Hart (above, n 3), no more is necessary. Law, understood as a system of rules, changes when and only when changes are made in accordance with a second order set of rules which render those changes valid. In Austin's terms, the law changes whenever the sovereign changes its mind and acts accordingly. We may still then ask when and why the sovereign might change his/its/our mind.

⁹ In Canada, for example, courts and tribunals universally endorse a single approach to statutory interpretation:

The instrumental inquiry of a judge or other legal actor into legislative intentions departs in two ways from the accounts of legal *evolution* that are the subject of this dissertation. For one, the latter aspire to provide an account of legal change that covers multiple cases, not just single episodes. Beyond identifying the factors that led to the repeal, reform, or establishment of a particular rule or that shaped a particular concept, their aim is to explain legal change *per se*.¹⁰ Whether the resulting account is intended to serve practical, normative, or purely scientific ends, achieving those ends is thought to require not only an account of ‘what led to ...’ (the rule, the concept, the regime, the doctrine) in a particular case, but also ‘what leads to ...’ in general.¹¹

Moreover, accounts of legal evolution are generally averse to explanations rooted in any unified intention. Evolutionary accounts might attend to ‘the intention of the legislator,’ but only *as a fiction* that is but one factor among many that ultimately contributes to the dynamics of legal change and (this will be important) to legal stability.¹² Evolutionary accounts work to understand the entire range of motivations and intentions that drive the churn of legal norms, acts, and meanings, and to grasp the mechanisms through which those drives are consolidated.

I. Motivation, Methodology, Structure

Let me take a step back. The intuition driving this project is that accounts of legal evolution have so far inadequately accounted for the role played by concepts, paradigms,

There is only one principle or approach, namely, the words of an Act are to be read in their entire context in their grammatical and ordinary sense *harmoniously with the scheme of the Act, the object of the Act, and the intention of Parliament*. (emphasis added)

The standard, first adopted by the Canadian Supreme Court in *Rizzo & Rizzo Shoes Ltd (Re)* 1 SCR 27, para 21 (Canada SC 1998) was taken verbatim from; Elmer A Driedger, *The Construction of Statutes* (Butterworths 1983) 83

¹⁰ Those who understand the content of the law as a function of some set of characteristics found in its social context (e.g. of needs, interests, or values, whether of society as a whole or of some particular group) will in effect get a theory of social change at no extra charge: under such an approach, changes in content follow changes in context. Landes and Posner, for example, apply this reasoning to the positive economic theory of the common law, whereby rules are primarily shaped by the principle of wealth maximization. William M Landes and Richard A Posner, ‘Legal Change, Judicial Behavior, and the Diversity Jurisdiction Change in the Common Law’ (1980) 9 J Legal Stud 367, 367. Such functionalist explanations of legal change are explored and critiqued in Chapters 3 & 4 below.

¹¹ The agendas or purposes that drive such accounts, and how those agendas might matter is explored in the conclusions in Chapter 6.

¹² Luhmann captures a sense of the dynamic by noting, in the legal argumentation that ‘[n]ot all “motives” of the legislator can be turned into law. One will never find written in the reasons of a judgment the statement that a legislative act was due to the manoeuvring of a political party or to the circumstance that it is now politically correct to take an anti-big-business position.’ Niklas Luhmann, *Law as a Social System* (Fatima Kastner and others eds, Klaus A Ziegert tr, Oxford University Press 2004) 115.

theories, models—the role played, in a word, by knowledge. Structurally, the dissertation proceeds toward a vindication of that intuition. The claim I ultimately confront is that once the role of knowledge is sufficiently integrated, the jurisprudential ambition to construct an evolutionary account of legal change may be impossible to fulfil.

Neither legal evolution nor knowledge were the project's starting point. Explaining how I ended up there will help illuminate the structure and agenda of the resulting dissertation. The first part of this introduction combines three tasks. It recounts the inspiration and genesis of the project, motivates the structure of the argument, and elaborates on key concepts which are explored and/or deployed over the course of the text.

A. From Measuring Law's Effects to Theorizing Causes of Law

The seeds of this project lie in a confrontation with an influential strain of legal scholarship, commonly labelled as Law & Finance or Legal Origins Theory.¹³ There is something curious about the contrast between its profound intellectual influence and its apparent analytical weaknesses. For a jurist, reading the founding texts of the field raises conflicting sensations. On the one hand, the methods introduced by its authors—large scale, quantitative comparative law—were undeniably ground-breaking, and the conclusions promised to add a significant dose of empirical rigour to the half-century old field of Law & Development.

Yet as a scholar familiar with comparative law, the studies seemed ... wrong. The studies predicted that certain effects would follow from identifiable changes to labour regulations and, as an erstwhile labour lawyer, I was sympathetic to the argument that the promised effects would not justify making the reforms that might produce them.¹⁴

¹³ The seminal texts are Rafael La Porta and others, 'Legal Determinants of External Finance' (1997) 52 *Journal of Finance* 1131; Rafael La Porta and others, 'Law and Finance' (1998) 106 *Journal of Political Economy* 1113. For the identification of the relevant strands of thinking with Andrei Shleifer, and commentary on distinctions between Law & Finance and Legal Origins, see Chapter 5.

¹⁴ A 2004 study by the team behind the original Law & Finance project found a correlation between an index of employment regulations and some labour market indicators, including unemployment rates and economic informality. The resulting Employing Workers Index (EWI) was integrated into the World Bank's *Doing Business* project and specifically aggregated into the Ease of Doing Business index which ranks countries using a composite of legal indicators. The EWI was attacked by advocates of labour market institutions for its inadequate conception of labour market functions and by jurists who emphasized the incompatibility of the policy advice implicit in the rankings with international labour standards (countries could earn a higher score by acting in violation of international labour standards). Perhaps most importantly, funding for the Doing Business project was threatened by US Congress, which directly led to the removal of the Employing Workers Indicator from country rankings, although the data is still collected annually. See Juan C Botero and others, 'The Regulation of Labor' (2004) 119 *The Quarterly Journal of*

More fundamentally, however, careful consideration of the way these studies constructed their data, the methods they used to analyse those data, and the conclusions they drew from those analyses gave rise to growing scepticism, and eventually frustration.¹⁵ I was not just resistant to the implications drawn from the findings of these studies, but sceptical about the methods on which their conclusions were based.

My scepticism joins with and draws on a chorus of criticisms that have been levelled against Law & Finance over the last twenty years. The critical challenge to the credibility of Law & Finance turns on a set of questionable premises the project advances about the nature of legal change and its relationships to economic development and political action. The reliance that these studies place on claims about the nature of legal change is not immediately obvious. It is possible to make convincing, credible claims about the likely instrumental consequences of changing a legal rule, or to compare the hypothetical consequences of alternative rules or regimes, without a nuanced account of how or why legal change happens. So long as the argument is analytical, all that is required is a good warrant for believing that the rule as legislated will bear enough similarity to the rule as analysed, and that practice under the rule will bear enough similarity to the behaviour that the analysis predicts under the rule. A logical argument about the causal relation between the two can suffice. Under ideal circumstances, these conditions would be sufficient to predict the consequences of changing a legal rule, or indeed, of introducing a set of new ones. You don't need to think about how such a change might be brought about or even know whether it will be, to say something about what may occur if it is.¹⁶

Economics 1339; Janine Berg and Sandrine Cazes, 'Policymaking Gone Awry: The Labor Market Regulations of the Doing Business Indicators' (2008) 29 *Comp Lab L & Pol'y J* 349; John Ohnesorge, 'Legal Origins and the Tasks of Corporate Law in Economic Development: A Preliminary Exploration' [2009] *BYU L Rev* 1619, 1626–27; Ralf Michaels, 'Comparative Law by Numbers? Legal Origins Thesis, Doing Business Reports, and the Silence of Traditional Comparative Law' (2009) 57 *Am J Comp L* 765, 773; Amanda Perry-Kessaris, 'The Re-Co-Construction of Legitimacy of/Through the Doing Business Indicators' (2017) 13 *Int JLC* 498, 506–07.

¹⁵ In the face of a positive argument that certain change in labour laws will produce an indicated set of labour market outcomes, one reasonable normative critique is that changing the rules in question would violate certain rights at work guaranteed by international law, and that, if there is a trade-off between the two, it would be a normative/legal/moral misstep for countries to violate labour rights to achieve those labour market outcomes. My point is that this normative argument is distinct from the question concerning the validity of the positive claim concerning whether the legal measures actually have the indicated economic effects.

¹⁶ That being said, scholars who continue to write about the salutary effects of rules, regimes, and interpretations, even in the face of evidence that those proposals have little chance of being realized, should at least be aware that they are engaged in a fruitless enterprise. Pierre Schlag, 'Spam Jurisprudence, Air Law, and the Rank Anxiety of Nothing Happening (A Report on the State of the Art)' (2009) 97 *Geo L J* 803.

Arguments that draw conclusions about law's effects from statistical analysis of empirical data, however, depend on complex thinking about the causal relationships among legal, social, political, and economic variables. Unless the economic and political factors shaped by law—productive institutions or relations of production, income distributions or class stratification, market structure or coalitions of interests—have no effect on what law gets made, credible conclusions about law's effects depend on a robust theory regarding the directions and strengths of all the causal arrows, including the effect of these other factors on the law that gets made. Credibility, in other words, requires a theory of socio-legal change. Absent such a theory, the findings of the Law & Finance studies dissolve into no more than a series of notable but unsurprising correlations between legal variables and economic ones.¹⁷ That stipulation was already implicit in the original Law & Finance studies, which conditions their findings on a theoretical link between a country's legal rules and the historical origins of its legal system. It was made explicit when the authors of the original studies developed their Legal Origins Theory to buttress the theoretical underpinnings of their initial findings against the attacks on their original theoretical premises.¹⁸

B. From Critique to (Incomplete) Reconstruction

Though inspired by bemusement about the success of Law & Finance, this dissertation is driven by scepticism of a much wider scope. Research projects in the social sciences broadly understood will generally be sparked by curiosity about how a process works, frustration over the wrongness of someone's argument, or a desire to fix some problem.¹⁹ Academic fads aside, unfortunately, researchers generally draw from the same pool of motivations in choosing their sites and episodes of research. Except in studies of very novel phenomena, one researcher's fascination with a subject will be a good sign that the subject has already been combed over.²⁰ So it goes with Law & Finance. My scepticism

¹⁷ Subsequent studies showed that for the early results even some of the correlations were spurious. In some cases, the correlations seemed to have been based on miscoded data, in others, they were an artefact of an overly narrow sampling across space and time. The critiques are given a summary review in Chapter 5.

¹⁸ Edward L Glaeser and Andrei Shleifer, 'Legal Origins' (2002) 117 *The Quarterly Journal of Economics* 1193; Simeon Djankov and others, 'The New Comparative Economics' (2003) 31 *Journal of Comparative Economics* 595; Rafael La Porta and others, 'The Economic Consequences of Legal Origins' (2008) 46 *Journal of Economic Literature* 285.

¹⁹ Kristin Luker, *Salsa Dancing into the Social Sciences: Research in an Age of Info-Glut* (Harvard University Press 2008).

²⁰ This brings to mind an old joke about an economics professor who is out walking with a friend. The friend spots a \$50 bill and reaches down to take it. 'Don't bother,' says the economist, laying a hand on his friend's

about the foundations of the Law & Finance project led into well-trodden territory. Collating and reviewing the arguments against the validity of Law & Finance could fill out a book. I momentarily suspected that nothing of use remained to be said on the subject, though as discussed below there is much to discuss beyond the validity of its arguments. The large body of scholarship that had critically engaged with Law & Finance, moreover, offered a useful bridge from ‘the wrongness of an argument’ to ‘curiosity about how a process works.’ While some attacks on Law & Finance were no more than external critique,²¹ founded on a fundamental opposition to the jurisprudential project fuelling Law & Finance,²² the majority of criticisms drew from a shared methodological orientation, similar epistemological coordinates, and the same theoretical ambitions.²³ Such responses, in other words, embraced the same objectives as Law & Finance, but felt those objectives could be pursued more effectively.

The preliminary reading for this project focused on debates catalysed by Law & Finance, but it did not stop there. Many of the most strident critiques of Law & Finance were assimilated into broader arguments that sought to develop an affirmative, substantive theory of legal change. Though much of the discussion was originally sparked by the intellectual upheavals instigated by Law & Finance, it is best to see the literature engaging with Law & Finance as part of a larger project engaged in the reconstruction of a theory of legal change.

C. Legal Evolution as Epistemological Ambition

Sometimes in a research project, once one has sifted through the relevant literature, a niggling sensation will remain, like a buried splinter. The fascination will no longer take the same shape as it did at first. The result is no longer a puzzle—like wondering of a

arm, ‘If it was real, somebody would have already picked it up.’ The joke is often used to illustrate the strange logic of the efficient capital markets hypothesis. Andrew W Lo, ‘Efficient Markets Hypothesis’ in Steven N Durlauf and Lawrence E Blume (eds), *The New Palgrave Dictionary of Economics* (2nd edn, Nature Publishing Group 2008).

²¹ ‘An internal critique is one made from within the premises of the system under examination. External critique is made from some point outside the system; historical or sociological or economic standpoints come easily to mind.’ John Henry Schlegel, ‘Of Duncan, Peter, and Thomas Kuhn’ (2000) 22 *Cardozo L Rev* 1061, 1061, n 4.

²² I have in mind studies that argued Law & Finance ‘misunderstood’ law. Pierre Legrand, ‘Econocentrism’ (2009) 59 *U Toronto LJ* 215; Vivian Grosswald Curran, ‘Comparative Law and the Legal Origins Thesis: *[N]on Scholae Sed Vitae Discimus*’ (2009) 57 *Am J Comp L* 863. The question of understanding is irrelevant; Law & Finance is concerned with explanation, which is something else entirely.

²³ I am not just speaking of work that cited the original studies: the data underlying the studies was the source of literally hundreds of subsequent studies, and for a long time, any work operating in large-scale quantitative comparative law noted Law & Finance as a precedent.

flying bee ‘how *does* it do that?’—but a mystery.²⁴ What fascination remains is no longer a naïve desire to describe how a practice works, explain the causes of some phenomena, or show why an argument fails. Curiosity turns instead towards the nature of the gap in existing accounts. There is something missing in the melody. But what is it?

As intimated above, the gap in the literature has to do with the role of knowledge in the dynamics of social and legal phenomena. Before elaborating on the nature of that gap, I need to more clearly delimit the literature I engage with. That is, I need to more precisely identify the type of theory being reconstructed in the shadow of Law & Finance. The critique I develop over the course of the dissertation certainly applies to Law & Finance itself. It certainly does not apply to all existing accounts of legal change.

The theme of legal evolution works to bring order to and set boundaries on a broad category of thought about legal change. Legal evolution appears in particular as a recurrent theme in debates with and against Law & Finance. Andrei Shleifer, primary author on the Law & Finance studies, has developed his arguments under the evolutionary idiom.²⁵ Others have embraced evolution as an apt category to capture the vision driving legal origins theory.²⁶ These references to evolution are not just serendipity: the evolutionary idiom gives pithy expression to the epistemological ambition shared by Law & Finance, its critics, and their broader intellectual milieu. Evolution is an appropriate and often-invoked label for accounts that seek to develop objective, general, empirical claims about law, which understand law’s origins to lay beyond legal reasons alone, and that aim to explain the continuing transformation of legal rules and regimes as a cumulative, emergent outcome of the interplay between a variety of forces—economic, political, and above all, legal.

²⁴ Gregory Treverton’s distinction between mysteries and puzzles was popularized in Malcolm Gladwell, ‘Enron’s Open Secrets’, *The New Yorker* (8 January 2007) <<https://www.newyorker.com/magazine/2007/01/08/open-secrets-3>> accessed 29 November 2018. There is a common myth that ‘science cannot explain’ how bees fly, a myth with no hint of truth to it. See eg M Sun, ‘Dynamic Flight Stability of a Hovering Bumblebee’ (2005) 208 *Journal of Experimental Biology* 447.

²⁵ Shleifer’s contributions to the ‘Coasean’ tradition include Nicola Gennaioli and Andrei Shleifer, ‘The Evolution of Common Law’ (2007) 115 *Journal of Political Economy* 43; Anthony Niblett and others, ‘The Evolution of a Legal Rule’ (2010) 39 *JLS* 325. I address the nature of Shleifer’s contributions to Law & Finance and Legal Origins in Chapter 5.

²⁶ For a good indication of the thematic and conceptual links between legal origins theory and legal evolution, see the table of contents and introduction in Simon Deakin and Katharina Pistor (eds), *Legal Origin Theory* (Edward Elgar 2012).

The use of the concept has both advantages and disadvantages. The key added value of the concept is that it draws attention to and brings together a broader tradition of literature that has tackled questions in much the same ways as Law & Finance. The positivist tradition of law and economics, for example, contains an expressly 'evolutionary' strain that has sought to explain legal change as an unguided interplay of economic interests and preexisting law.²⁷

The downsides are two-fold. The first is the threat of analytical confusion caused by interdependencies between more and less substantive senses of evolution. While some have used evolution loosely, to indicate a shared commitment to capture a scientific view of law as a partially unplanned outcome of factors internal and external to the legal system, others have understood evolution as a more substantive concept, whose structure provides a map for constructing such accounts. In particular, many take evolution to be an appropriate label only for theorizing about law that draws from Darwin-inspired evolutionary theory. The second downside is the interplay between the scientific sense I have foregrounded here and an older, developmentalist meaning tied to a tradition of Victorian historicism and faith in progress. These complexities meant that wrestling with the concept entailed a delicate trade-off. Evaluating the arguments of authors who relied expressly on evolutionary concepts required vigilance to avoid reifying the concept's associations with fitness, efficiency, or development toward optimal forms.

D. The Mysterious Success of Law & Finance

Despite the strengths of the broad literature on legal evolution, that missing note in the melody remains. On one level, sophisticated accounts of legal evolution provide a theoretical account of legal change that transcends the shortcomings of Law & Finance. Yet they are ill-equipped to wrestle with the implications of Law & Finance as an intellectual project. For as much as it may be true that Law & Finance does not 'work,' in the sense of putting forward arguments grounded in a convincing theoretical baseline, it has done a great deal of 'work' in driving legal reform. Law & Finance may be incomplete or inaccurate, but it is also important.²⁸

²⁷ This Coasean approach to explaining legal change is addressed in Chapter 2.

²⁸ Ruth V Aguilera and Cynthia A Williams, 'Law and Finance: Inaccurate, Incomplete, and Important' [2009] *BYU L Rev* 1413.

For some purposes, faulting evolutionary theories for failing to explain the success of Law & Finance would commit a category error. The question of what makes a theoretical framework more or less successful belongs to the sociology of knowledge, broadly understood.²⁹ Theories of legal change can hardly be faulted, so the argument might go, for failing to answer questions that belong to another subfield or, indeed, to an entirely distinct discipline. The problem is that the success of Law & Finance seems to far exceed its uptake as a scientific paradigm. Indeed, as will become clear when its ramifications are mapped out more extensively, Law & Finance has had substantial success as a legal reform project across dozens of countries.

This state of affairs suggests that questions on the side of jurisprudence or sociology of law, like asking how law changes, may not be so easy to untangle from questions arising out of sociology of knowledge, like asking what makes a theory successful. An engagement with Law & Finance was not so easily obviated.

Law & Finance thus serves double duty in this dissertation. On the one hand, it stands as a workable example of a project committed to capturing the dynamic relation between law, economics, and politics in positive, scientific terms. For reasons that will become clear, Law & Finance serves as more illustrative than exemplary, relevant only insofar as it inspired my interest in this broad tradition of historiography. In its role as a historical object, on the other hand, Law & Finance offers a striking case study in the apparent limits of that historiographical tradition.³⁰ In particular, the practical legacy of Law & Finance forces into view a relationship that the study of law usually takes for granted, namely the nature of the relationships between law as an object (i.e. as a practice, discourse, institution, or body of norms), law as a form of knowledge in particular, and other forms of knowledge about social and economic life.

E. Complications of Law's Relation to (Legal) Knowledge?

Traditional legal scholarship is generally predicated on anticipated practical effects.³¹ It is sometimes structured as a prescriptive argument about how certain norms should be

²⁹ The classic of the field seized upon by an earlier generation of legal scholars was Thomas S Kuhn, *The Structure of Scientific Revolutions* (3rd edn, University of Chicago Press 1996), first published 1962.

³⁰ I owe the distinction between engaging with an argument as a contribution to historiography and analysing an intellectual project as a historical object to Knox Peden, 'The Abstractions of History' [2014] Sydney Review of Books.

³¹ Justice Edwards' classic lament that 'many law schools, especially the so-called "elite" ones, have abandoned their proper place, by emphasizing abstract theory at the expense of practical scholarship' in a

applied or interpreted. In other cases, it takes the form of an attempt to detail the ‘proper,’ objective answer to some legal question. In the latter case, the register of the inquiry is positive rather than normative: it nominally addresses what the law is, rather than what it should be. In either case, however, the argument is likely to be motivated by an aspiration that someone will do something with the findings.³² Even where inquiry aims to empirically capture the content of the law, the conduct of that inquiry is often shaped by a conception, or at least a vague intuition, about the ways in which legally-empowered actors might respond to the argument and its conclusions. At first glance, this gives rise to a contradiction between explicit task and implicit motive, a contradiction which does not generally arise for work in the explicitly prescriptive register. It is perfectly valid to develop an argument about what the law should be in the hopes that a judge or regulator will follow your reasons in their decisions. Yet from the perspective of positive social science, there is something anomalous about offering an account of phenomena whose accordance with fact is currently weak, but which may become stronger in the future—as when the contradictions between an analysis of a doctrine and existing judicial decisions is attenuated by the possibility that future decisions will more closely emulate it. It is stranger still for the validity of an account to depend in part on whether or not certain actors are swayed by it. Nonetheless, so long as you are willing to distinguish an object called ‘the law’ from what judges actually do and have actually done—an object that may be determined by conceptual predicate, legislative intention, normative coherence or otherwise—it is perfectly valid to argue against existing jurisprudence on a purportedly legal basis, in the hopes that empowered actors, informed by the quality and content of your reasoning, will bring administered legal fact back into conformity with putative legal norm. There may be some misdirection involved where scholars clothe what they know to be a normative, ‘should be’ argument in an analytical, ‘actually is’ form, but such pretense does not affect the validity of the argument as mounted. There is in a sense no empirical test for whether the description of the law developed is correct or not. No matter what judges do in the long term, an argument about the ‘actual’ law can prevail, awaiting some future recognition by a sufficiently canny court.³³

sense illustrates the point by counterexample. Harry T Edwards, ‘The Growing Disjunction between Legal Education and the Legal Profession’ (1992) 91 Mich L Rev 34.

³² The stereotype I have in mind is the doctoral candidate in law who hopes above all that the arguments from her dissertation will be adopted by the Supreme Court.

³³ My argument, in sum, is that such forms of legal scholarship accord with a conception of practical reason concerned with methods of developing beliefs that are neither subjective or capricious, nor verifiable by

When it comes to evolutionary accounts, however, the form of reasoning about law is a different creature. The motivating idea behind such research is that law-makers will create a regime, adjust a standard, or adopt an interpretation based on the effects that the researcher claims those reforms will have on the world beyond the legal field. Again, on its own, a claim about the salutary or perverse effects of a legal norm on behaviour, and on the social variables that aggregate over behaviour, need not be troubled by the social salience of the argument itself. The legal literature is rife with a priori speculation about how people's actions will vary in response to different norms, and with instrumental reasoning on that basis about what norms should therefore be; so is the case law of most legal systems. Socio-legal research by contrast (including empirical law-and-economics research) is defined by its dependence on an empirical foundation. The intention is not simply to offer a plausible causal account, but to back up that reasoning with data drawn from actual laws and actual behaviour. And in the case of evolutionary accounts in particular, the reasoning combines claims about the effect of law on the world with claims about the effect of the world on law. The conclusions to be extracted from these accounts are contingent on a chain of causal reasoning whose credibility hinges on an empirical reckoning with the factors that actually made a difference.

Given the avowed aspiration of legal scholarship to operate as a cause of legal change, such a reckoning needs to either integrate the causal salience of scholarship, or explain why such scholarship can be safely ignored. A few possibilities present themselves. One answer might be that scholarship, for all its pretense and ambition, has no meaningful effect on law.³⁴ One permutation of this premise would be that scholarship matters, but to such a small degree that accounts can safely approximate its relevance by ignoring it entirely.³⁵ Another variation, similar in form to arguments from economics used to

precise logic or direct observation. Such a conception is embraced inter alia by Richard A Posner, *The Problems of Jurisprudence* (Harvard University Press 1990) 71–72. My point, more emphatically, is that such arguments cannot be empirically or logically falsified.

³⁴ Pierre Schlag has a well-honed critique that American legal scholars are over-invested in producing legal analysis for an audience of judges who are no longer listening. Pierre Schlag, 'Normative and Nowhere to Go' (1990) 43 *Stan L Rev* 167, 167–68; Schlag (n 16). Judge Posner, making a related point, has suggested that legal scholarship per se, at least, again, in the American case, significantly declined during the last half of the twentieth century. Richard A Posner, 'The Decline of Law as an Autonomous Discipline: 1962-1987' (1987) 100 *Harv L Rev* 761.

³⁵ The idea I have in mind here is that the relation between legal scholarship and law might be like the relation between Pluto and other planets in the solar system. A slight wobble in the orbit of Neptune was in part responsible for the discovery of Pluto: William Graves Hoyt, 'W. H. Pickering's Planetary Predictions and the Discovery of Pluto' (1976) 67 *Isis* 551, 552–53. Despite the wobble, however, for most purposes the behaviour of the rest of the solar system can be modelled without accounting for Pluto's presence.

reconcile the efficient market hypothesis with the presence of individual irrationality, is that the contributions of scholarship ‘come out in the wash.’³⁶

This version bleeds into a very different claim mooted by the German sociologist Niklas Luhmann that at least some forms of legal scholarship, such as jurisprudence, are both part of law, broadly understood, and constitutive of law as a social system. Luhmann might say we need to distinguish between internal observations of law, which are part of the processes through which the legal system reproduces itself, and external observations.³⁷ In a sense, Luhmann collapses the boundary between ‘law’ and (internal) ‘knowledge of law.’ If this is right, it would be a mistake to think of the relation between law and jurisprudence in familiar causal terms.

One of the perspectives developed through the dissertation is that evolutionary accounts of legal change cannot be expressed through claims about law alone. The distinction between internal and external observations of law is not as stable or as determinate as Luhmann posits. The Law & Finance episode, in particular, suggests both that scholarship enters into the causal dynamics of law-making to a non-negligible degree and that its relevance cannot be reduced to a dynamic or process internal to ‘law.’³⁸

Even if law’s relation to knowledge cannot be reduced to a wholly internal relation between law and legal knowledge, another approach might settle the challenge to evolutionary accounts posed by the relationship between law and social knowledge. It is possible that claims about law’s relation to its environment, of the kind typified by Law & Finance, might be reducible in some way to an effect of economic or political action on law. This possibility needs some elaboration. It requires thinking beyond scholarship

³⁶ cf Gilson and Kraakman, who suggest that the mystique of the efficient capital markets hypothesis lies in the putative capacity of the market to act rationally—as if all participants had immediate and costless access to information—even though many do not. Ronald J Gilson and Reinier H Kraakman, ‘The Mechanisms of Market Efficiency’ (1984) 70 Va L Rev 549, 552–53.

³⁷ Systems theory approaches to law, and the nature of these distinctions, are given greater attention in Chapter 4.

³⁸ In systems theory terms, such scholarship may be received by the legal system as no more than an irritation. Its observation by the legal system may be constituted entirely through legal discourse. My argument would then be that scholarship of this sort is an important part of the environment, whose relevance must be specifically addressed. Luhmann certainly understood his scholarship as part of a ‘scientific’ social system. Peter Kennealy, ‘Talking About Autopoiesis—Order from Noise?’ in Gunther Teubner (ed), *Autopoietic Law: A New Approach to Law and Society* (W de Gruyter 1988) 353–54. He does not seem to have wrestled with the relationship between scientific theories of society and law as social system.

proper, and engaging more broadly with knowledge, both of law and of the world beyond it.

F. Varieties of Knowledge

'Knowledge' is an imperfect concept for the dimensions of social life I am trying to capture, but no better terminology comes to mind. I am particularly wary of evoking the folk conception of knowledge, i.e. justified true belief. My usage is not limited to beliefs at all.³⁹ It is intended instead to capture an eclectic and diverse collection of *epistemic objects*.⁴⁰ But even that category may be inadequate. I operate in the shadow of Polanyi's distinction between explicit and tacit knowledge.⁴¹ In some cases, knowledge can best be captured with the verb 'to have': to know the names of individual constellations is to have something. But a great deal of knowledge is a matter of ability or capacity, better understood with the verbs 'to do' or 'to be able to.'⁴² Being able to ride a bike is something one knows how to do, and knowing how to do it is not the same as knowing the list of steps, like: 'left pedal, right pedal, stay balanced! But don't let go of the handle! Left pedal ...' It is something that the body knows how to do or, better, something that the brain and the body know how to do together. Interventions of the deliberate or the conscious into attempts to do it will not help, and will often, in fact, be hindrances.

I will hazard that most knowledge lies between these extremes. Knowing a language, for example, depends on the possession of a certain vocabulary. But words are not like slips of paper pulled out of a hat. Knowing a word is entangled with a sense of grammar, both in the narrow sense of having a sense of the syntactic structures that limit how it can be combined with others in sentences, and in the broader sense, due to Wittgenstein, of understanding what the word, in combination with other words and drawing on a given

³⁹ The folk epistemology that understands knowledge as roughly coincident with justified true belief is older than Plato. Gettier is famous for criticizing this definition. While Plantinga argues that this was not a very common position among philosophers before Gettier, he admits that may have been widespread as folk epistemology. Jonathan Jenkins Ichikawa and Matthias Steup, 'The Analysis of Knowledge' in Edward N Zalta (ed), *The Stanford Encyclopedia of Philosophy* (Summer 2018 edn, Metaphysics Research Lab, Stanford University 2018); Alvin Plantinga, *Warrant: The Current Debate* (Oxford University Press 1993).

⁴⁰ Hans-Jörg Rheinberger, *Toward a History of Epistemic Things: Synthesizing Proteins in the Test Tube* (Stanford University Press 1997); Lorraine Daston (ed), *Biographies of Scientific Objects* (University of Chicago Press 2000).

⁴¹ Michael Polanyi, *The Tacit Dimension* (The University of Chicago Press 1966).

⁴² Wittgenstein, for example, notably insisted that understanding the meaning of a word is not like possessing a something, 'as if the meaning were an aura the word brings along with it,' Ludwig Wittgenstein, *Philosophische Untersuchungen / Philosophical Investigations* (PMS Hacker and Joachim Schulte eds, GEM Anscombe and others trs, 4th edn, Wiley-Blackwell 2009) para 117.

context, can be used to do.⁴³ The category I have in mind thus includes predicates that can be the object of belief ('there is a country called Canada'), concepts and categories ('Canada'; 'countries'),⁴⁴ models ('the world is divided into countries'),⁴⁵ postures and orientations ('what body of domestic law is under discussion here?'),⁴⁶ and routines and techniques (how to construct a sentence in English).⁴⁷

G. Forget Nuance

It is always possible to add more nuance to an account of social dynamics. As memorably argued by Kieran Healy, however, it is not always beneficial to do so.⁴⁸ Knowledge is omnipresent in social life, but that does not mean we need to include it as a salient category in our accounts of legal change.

It is a now hoary conclusion of social constructivism that many of the phenomena that structure our day-to-day reality cannot be divorced from, and are in fact actively maintained by, our shared belief in them.⁴⁹ Canada might continue existing if I stopped believing in it, but its place in our reality would shrivel up in a snap if *everyone* did.⁵⁰ This is not equivalent to saying that Canada exists only because of, or only through, a shared

⁴³ Constantin Fasolt, 'Respect for the Word: What Calvin and Wittgenstein Had against Images' in Amy Nelson Burnett (ed), *John Calvin, Myth and Reality: Images and Impact of Geneva's Reformer* (Cascade Books 2011).

⁴⁴ Reinhart Koselleck, 'Temporalization of Concepts' in *Finnish Yearbook of Political Thought* (University of Jyväskylä 1997) vol 1; George Lakoff, *Women, Fire, and Dangerous Things: What Categories Reveal About the Mind* (University of Chicago Press 1990); Giovanni Sartor, 'Legal Concepts as Inferential Nodes and Ontological Categories' (2009) 17 *Artif Intellig & L* 217; Giovanni Sartori, 'Concept Misformation in Comparative Politics' (1970) 64 *The American Political Science Review* 1033; Geoffrey C Bowker and Susan Leigh Star, *Sorting Things Out: Classification and Its Consequences* (MIT Press 1999).

⁴⁵ Mary S Morgan, 'Models' in Steven N Durlauf and Lawrence E Blume (eds), *The New Palgrave Dictionary of Economics* (2nd edn, Nature Publishing Group 2008).

⁴⁶ Pierre Lamaison and Pierre Bourdieu, 'From Rules to Strategies: An Interview with Pierre Bourdieu' (1986) 1 *Cultural Anthropology* 110; Fleur Johns, *Non-Legality in International Law: Unruly Law* (Cambridge University Press 2013) ch 1.

⁴⁷ Annelise Riles, 'A New Agenda for the Cultural Study of Law: Taking on the Technicalities' (2005) 53 *Buff L Rev* 973; Alain Pottage, 'Law after Anthropology: Object and Technique in Roman Law' (2014) 31 *Theory Culture Society* 147.

⁴⁸ Kieran Healy, 'Fuck Nuance' (2017) 35 *Sociological Theory* 118 ('Nuance is not a virtue of good sociological theory').

⁴⁹ Classic investigations of the premise that our shared experience, including not only our knowledge of the world, but the shape and structure of that world is constructed through social action, include Peter L Berger and Thomas Luckman, *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. (Penguin Books 1967); John R Searle, *The Construction of Social Reality* (Allen Lane 1995). Ian Hacking, *The Social Construction of What?* (Harvard University Press 1999) offers a particularly lucid investigation of the concept.

⁵⁰ A similar scenario was explored in José Saramago, *Seeing* (Margaret Jull Costa tr, 1st US ed Harcourt 2006).

belief in its existence.⁵¹ But belief in its existence, and more broadly, a widely-shared practice of acting as if Canada exists, is a but-for cause of its existence.⁵²

In a pedestrian sense, then, knowledge is an indelible dimension of processes of socio-legal change. What does not necessarily follow is that knowledge needs to be integrated into accounts of those processes. Latour reminds us that it is perfectly reasonable to treat aspects of the world as black boxes, even though they may be maintained by a network of more complicated factors, operating as it were ‘under the hood.’ We can drive quite well without having to think about how a car engine works; the perspective of the car as a driving machine rather than an assemblage of parts is only shattered when the car stops working.⁵³

It is easy to come up with legal contexts in which Canada is a relevant factor, not just legally, but economically and politically as well. One example would be litigation over economic losses occasioned by a government policy decision.⁵⁴ Canada will be implicated in multiple ways: as an agent whose actions are being challenged, as the jurisdiction from which the applicable law is drawn, as the origin of a political culture that might factor into the outcome, and as a political community whose policy choices are at stake. For each of these dimensions, we could provide a thick description of how the relevant factor is mediated or constituted by knowledge, or even replace that element with an epistemic account. Canada is the relevant agent: everyone takes for granted that Canada is the

⁵¹ Bruno Latour and his erstwhile collaborator Michel Callon have pointed in a number of cases to the ways in which social realities are constructed not only out of the belief and actions of persons, but through an interaction between human agents and a wide array of material ‘stuff,’ from office buildings, computer databases, uniforms and insignia, or rules and schedules. Michel Callon and Bruno Latour, ‘Unscrewing the Big Leviathan: How Actors Macrostructure Reality and How Sociologists Help Them to Do So’ in AV Cicourel and K (Karin) Knorr-Cetina (eds), *Advances in Social Theory and Methodology: Toward an Integration of Micro- and Macro-Sociologies* (Routledge & Kegan Paul 1981); Bruno Latour, ‘Visualisation and Cognition: Drawing Things Together’ in *Knowledge and Society: Studies in the Sociology of Culture Past and Present* (Jai Press no date).

⁵² The state has been a central preoccupation of studies, identifiable above all with Foucault, into the interaction between epistemic practices that take the existence of a certain entity as given and governance practices which depend on the establishment and maintenance of certain forms of social and political order. Useful entrees into this line of inquiry include Timothy Mitchell, ‘Society, Economy, and the State Effect’ in George Steinmetz (ed), *State/Culture: State-Formation After the Cultural Turn* (Cornell University Press 1999); Andrew Lang, ‘Governing “As If”: Global Subsidies Regulation and the Benchmark Problem’ (2014) 67 *Current Legal Problems* 135.

⁵³ Bruno Latour, *Science in Action: How to Follow Scientists and Engineers Through Society* (Harvard University Press, 1987) 106–07; Bruno Latour, *An Inquiry into Modes of Existence: An Anthropology of the Moderns* (Harvard University Press 2013) 217.

⁵⁴ A good example is *Antrim Truck Centre Ltd v Ontario (Transportation)* 1 SCR 594 (Canada SCC 2013). In *Antrim*, the Supreme Court of Canada found that the government of Ontario, used here as a proxy for ‘Canada’, was liable for economic harm when it built a new highway that resulted in traffic being diverted away from a service centre owned by the plaintiff.

relevant actor. Canada is the relevant jurisdiction: lawyers are trained in a Canadian legal tradition that is partially expressed as explicit knowledge of Canadian law. Canada wants to defend its policy decisions: government lawyers are motivated by an idea of the public's preference or of the preferable policy outcome. The judge has policy preferences that may bear on outcomes: he or she has an idea of what social relations are at play in a case, as well as beliefs about what policy options are preferred by the general public.

We *can* do this, and we will learn something by doing so. But if our purpose is to explain the outcome of a case, or to understand its effect on the legal order or economic relations, it is far from obvious that making inquiries into epistemic questions would advance our work. By the same token, we have to take seriously the possibility that attending to knowledge will only add unnecessary complexity to a project of predicting legal change, identifying the factors that shape it, or describing the processes through which it occurs. We do not need to think about fundamental physical forces or the atomic makeup of materials when trying to understand why a boat floats on water. It is enough to have an account of the relationship between the mass, buoyancy, and density of an object and its surrounding fluid.

Consider an example. There is obviously some difference between economic actors' interests and their understanding of how those interests are best pursued in a given context. It might nonetheless be possible to construct an account of the economy in terms of economic context and economic action that comprises facts, preferences and values, and epistemic elements.⁵⁵ A more complicated claim is that, even if there is an ontological difference between the interests pursued by particular groups of economic actors and the premises and ideas they use to pursue them, their ideas nevertheless might be determined in some way by those interests. Some Marxist approaches to 'ideology' seem to have in mind just such a relationship between ideas and interests.⁵⁶

⁵⁵ Herbert Gintis is among those who have done ground-breaking work to show that even the simplest game theory models rely on surprisingly thick assumptions about the epistemic capacities and shared substantive knowledge of the participants. Herbert Gintis, *The Bounds of Reason: Game Theory and the Unification of the Behavioral Sciences* (Princeton University Press 2009). Gintis' work, especially as applied by Simon Deakin, is given further attention in Chapter 4.

⁵⁶ See e.g. David Harvey, *A Brief History of Neoliberalism* (Oxford University Press 2005). Gramsci is often used as a metonym for this strain of reasoning, though I hold my peace on how well it reflects his actual theorizing.

II. Outline

I close these preliminaries by integrating a discussion of the dissertation's organization and methodology with a roadmap of the chapters to follow. Structurally, the dissertation's argument works in the spirit of the mathematical argument by contradiction. I start with models and approaches that give no explicit account of knowledge, then examine their tacit and explicit epistemic assumptions, and then examine whether those assumptions conflict in any relevant, significant way with the operation and salience of knowledge in real-world contexts. The intent is to allow evolutionary approaches to put their best foot forward and give them a chance to show that reality can be captured, or at least adequately approximated, without having to give knowledge explicit attention. The thinness of any account of knowledge, even an unrealistic account, is no proof of its inadequacy. What is important is whether that unreality threatens the validity of the model.

Methodologically, then, the dissertation's key chapters draw on methods that sit between critical legal studies and intellectual history. Drawing on what Riles and Johns call 'quasi-ethnography',⁵⁷ the preliminary task in each chapter is to provide a thick description of how the literature understands legal evolution, and then to elicit or reconstruct how epistemic issues are dealt with in those accounts.

Chapter 1 uses an inductive method rooted in intellectual history to develop a set of criteria that distinguish 'evolutionary accounts of legal change' from other jurisprudential agendas.

Drawing on a genealogy of the concept of evolution, I identify a nineteenth-century connotation of evolution that continues to have resonance in theories that imagine law's path of development as an intrinsically salutary process, or that use the concept of evolution to distinguish between beneficial and harmful modes of legal change. I distinguish that conception from a more recent usage that is used to express and invoke an epistemological ambition to describe legal change, using positivist methods, as an emergent, rather than designed, outcome of enumerated forces working through

⁵⁷ Riles (n 47); Leila Kewar, 'Making the Machine Work: Technocratic Engineering of Rights for Domestic Workers at the International Labour Organization' (2014) 21 *Ind J Global Legal Stud* 483; Johns (n 46) 21–22.

specified mechanisms. I close the chapter by addressing the role played in some of this literature by evolutionary theory.

The passage through Chapters 2 to 5 is intended to capture successive demonstrations that knowledge does matter to accounts that aspire to be 'evolutionary.'

Chapter 2 begins the investigation of such evolutionary approaches by examining a 'Coasean' approach that attributes processes of legal change to a continual interplay of self-interested motives under institutional constraints. A central sub-tradition, identifiable with Richard Posner's well-known hypothesis about the efficiency of judge-made law, was developed expressly under the evolutionary idiom. By drawing out the analytical pedigree of this literature and, specifically, by tying it to seminal contributions from Ronald Coase and Mancur Olson, I am able to develop a broader tradition that is evolutionary in the sense set out in Chapter 1 (if not always in name) and that roots legal change, under the idioms of efficiency and rent-seeking, in the actions of self-interested individuals.

The chapter concludes with two observations. I first suggest that contingency and path dependency, rather than predictable development pathways, are the only credible generalizations that can be drawn from accounts of this type about the relationship between law-making institutions and legal outcomes. I also suggest that, so long as the basic coordinates of the underlying model are sufficiently robust, the resulting analytic could provide a powerful toolkit to understand the fortunes of particular legal norms under the action of particular law-making institutions.

The next chapter places the basic structure of those models under significant strain, by inquiring into the validity of their implicit suppositions about knowledge. **Chapter 3** serves two purposes. First of all, in anticipation of the discussion in Chapter 4, it makes an initial foray into possible contributions of evolutionary theory to robust accounts of legal change. In conversation with Robert Gordon's conception of functionalism and MBW Sinclair's conception of adaptationism, I explore whether the Darwinian algorithm of variation, selection, and inheritance can be used to understand the weaknesses in the Coasean approach to legal change.

While the failure to provide an account of evolutionary inheritance dooms some of the earliest contributions to the Coasean paradigm, later examples did include accounts of

how norms are reproduced over time. Closer attention to evolutionary theory, however, suggests that an account of an evolutionary process that can combine change with stasis needs to more than account for mechanisms of variation, selection, and inheritance. It must address the relationship between the three.

Inspired by that perspective, I return to the Coasean models, working through a close reading of a strong example developed by William Landes and Richard Posner. My key intervention is to inquire into the mechanisms that allow shared knowledge about the contexts in which rules are applied to be reproduced over time, given the incentives individuals have to contest what would otherwise be a shared understanding. The answer to that question is rather simple: the legal system itself reproduces that knowledge. Yet considering law's role in stabilizing a shared field of meaning requires identifying key categories of social life, and law's management of those categories, as another facet of legal change that needs to be integrated into any analysis of the transformation of norms.

Chapter 4 engages with a theory of socio-legal change that has taken up this challenge to the Coasean approaches in earnest, namely Simon Deakin's theory of legal-economic co-evolution. Deakin's approach draws on the systems theory of Luhmann and Teubner to address law's reproduction of a relatively consistent conceptualization of economic contexts. To a significant extent, his approach synthesizes this systems-theoretical, internal account of law and legal change with an economic approach that, like the Coasean paradigm, understands legal rules through their external shaping of incentives for actors in the economic system. These views are synthesized into an account of legal-economic co-evolution that draws from accounts of legal evolution in the work of Luhmann and Teubner, from epistemic evolutionary game theory, and from a broader tradition of cultural evolution crystallized by Donald Campbell.⁵⁸

The second half of Chapter 4 once again takes up questions related to the salience and relevance of knowledge in relation to Deakin's account. My strategy involves a close reading of an extended application of his approach to craft a genealogy of the contract of employment in the UK. My examination reveals ways in which knowledge, in terms of ideology, expertise, and design, is not just present, but also exercises some agency in the

⁵⁸ Donald T Campbell, 'Variation and Selective Retention in Socio-Cultural Evolution' in Herbert R Barringer and others (eds), *Social Change in Developing Areas: A Reinterpretation of Evolutionary Theory* (Schenkman Publishing Company 1965).

processes he depicts. While I address the possibility that this conclusion applies only to 'social' issues that are bound up with government policy and legislative action, I close by raising questions about the place of economic knowledge in his accounts of more traditional areas of private and economic law.

The strongest conclusion that can be drawn from Chapter 4 is that opinion, planning, and forms of representation about economic life—that is, knowledge beyond legal discourse—seem to play a role in the medium-term development in some areas of law; possibly only those areas of law that have an indelible social dimension. **Chapter 5** engages in an extended case study, tracing the effect that the Law & Finance project has had on legal reforms in a number of countries, suggesting not only that ideas about the economy can shape law, but that ideas about law's relation with the economy can shape law as well.

The bulk of Chapter 5 however, is not given over to showing that Law & Finance matters, but rather to trying to motivate the claim that its effect is not reducible to factors that can be described as 'legal,' 'political' or 'economic.' To that end, the chapter is primarily devoted to accounting for the influence of Law & Finance, rather than demonstrating that influence. The first half illuminates the conceptual structure underlying the methodology of the Law & Finance studies, exposing the shortcomings of the theory applied in these studies to make causal inferences from the data and to draw policy conclusions from those causal claims. After providing a short review of the affinities between Law & Finance studies and the World Bank's *Doing Business* project, and then providing evidence of how influential the *Doing Business* project has been for legal reform in developing countries, the second half of the chapter turns to explanation. Though I focus on what made the studies attractive to actors at the World Bank, my reflections draw on thinking about policymaker motivations more generally. To summarize, I suggest that while thin accounts of international political economy, national context, causation, and agency all weaken the ostensible scientific validity of the Law & Finance studies, each of these factors also makes their methodology more attractive to an organization with the World Bank's particular agenda and to policymakers engaging in symbolic politics and a competition for international investment dollars.

The concluding reflections in **Chapter 6** pursue three lines of inquiry flowing out the investigations in the dissertation. After examining a recent case study on the power of

economic thought to shape American judging, I turn from the question of whether knowledge needs to be given attention in models of legal evolution to how knowledge might matter. I provide an initial typology of the channels by which both vernacular understandings and models developed by experts might come to matter, through explicit communication during litigation and legislation, but also passively through the training of lawyers and the lived experience of a shared culture. I emphasize, however, that what scholars should do with any awareness of the salience of knowledge ultimately turns, not on an absolute standard of scientific validity, but on an evaluation of what legal scholarship, including scholarship about law's causes and effects, is intended to do. If scholarship is intended to pursue an intrinsically normative agenda, then this knowledge does not require any change to existing practices. On the other hand, if we cleave to the positivist posture underlying the evolutionary ambition, we are stuck in a catch-22 because our work either remains irrelevant, or implicates us in the processes that we are trying to describe as neutral observers.

1 — Legal Evolution and its Agendas

'In the course of the last hundred years, and under the influence of the ideas of Comte, Darwin, Marx, Freud, and Veblen, we have come to minimize the importance of 'reason' in determining the course of history. According to these ideas, 'reason' ceases to be the power holding in check the dark forces of superstition, self-interest, and unreason, and instead rational systems become themselves the expression of dark and uncontrollable forces.'
—Daniel Boorstin (1941)¹

'What is at stake is not the definition of a word, but the usefulness of a theory'
—MBW Sinclair (1987)

This chapter constructs a list of criteria that can discriminate evolutionary accounts from other accounts of legal change, and which together provide a metric which distinguishes better from worse evolutionary accounts. To cut to the chase, the payoff of this chapter is that most contemporary references to 'evolution' in discussions of legal change are linked above all to an epistemological ambition to construct a positivist account of law as an emergent, rather than designed, outcome of enumerated forces working through specified mechanisms, and of legal change as a reflection of the operation of those mechanisms. The ideal of legal change entailed by the appeal to legal evolution, is a natural, emergent process capturable using the tools of modern, positivist social science. The more an account integrates telos or purpose, the poorer the claim to being evolutionary. The weaker an account's coherence with empirical realities, the less successful it is as an evolutionary theory. The success of the evolutionary ambition is also undermined by a lack of generality, or by opaque articulation of mechanisms.

This phrasing puts things in a somewhat awkward and unfamiliar way. The typical listing of definitions in the beginning of any research project is usually articulated in terms of

¹ Daniel J Boorstin, *The Mysterious Science of the Law: An Essay on Blackstone's Commentaries* (University of Chicago Press 1941) 5.

what the research object *is*, not what it is associated with. I have put things this way for the same reason that I have spent an entire chapter defining a single key term. It has been motivated by a desire to let my interlocutors define their own project, informed by scepticism that this project can be fulfilled. Let me elaborate.

The overall task of this dissertation is to showcase, reflect on and critique a broad mode of accounting for legal change. My goal is either to show how existing evolutionary theories of legal change might be improved with a more careful appreciation of the role of knowledge practices, or to demonstrate how attention to knowledge challenges the validity of applying the evolutionary idiom to law. As with any task of analysis, however, saying anything meaningful about evolutionary theories of legal change requires careful identification of the class of phenomena under examination. Likewise, to critique or evaluate, we must first possess a standard against which to evaluate particular examples. The goal of this chapter is thus to address a pair of interrelated questions: how might we distinguish evolutionary accounts from other ways of comprehending legal change? And on what basis might we say that any such account is superior to another?

Identifying appropriate criteria has been no easy task. A definition of legal evolution that was tied to my own caprices and biases would mean any weaknesses or failures I might identify in existing accounts could turn out to be no more than a second-order effect of my own misperceptions and misconceptions.² Those who have attempted to bring order to the literature on legal evolution have pointed in multiple, sometimes conflicting, directions.³ Rather than focusing my attention on prior efforts to explicitly delineate the meaning of the concept or delimit the boundaries of its application, then, I threw my net wide, sampling from the considerable body of legal scholarship that has found evolution to be an appropriate concept with which to frame for their respective inquiries into a variety of phenomena.⁴

² That is, to the degree that I wanted to critique evolutionary approaches I wanted to ensure that I was not critiquing a straw man that has no correspondence to what anyone believed.

³ Robert C Clark, 'The Interdisciplinary Study of Legal Evolution' (1981) 90 Yale LJ 1238; E Donald Elliott, 'The Evolutionary Tradition in Jurisprudence' (1985) 85 Colum L Rev 38; Herbert Hovenkamp, 'Evolutionary Models in Jurisprudence' (1985) 64 Tex L Rev 645; MBW Sinclair, 'The Use of Evolution Theory in Law' (1987) 67 U Det L Rev 451; Simon Deakin, 'Evolution for Our Time: A Theory of Legal Memetics' (2002) 55 CLP 1.

⁴ Between 1980 and 1997, nearly 400 articles listed in American law reviews were published with evolve or evolution in the title. Jeff L Lewin, 'The Genesis and Evolution of Legal Uncertainty about Reasonable Medical Certainty' (1998) 57 Md L Rev 380, 390, n 37. A similar search on HeinOnline today reveals over 3,300 articles, notes, and reviews with evolve or evolution in the title.

My investigations yielded a list of criteria that work both to qualify an account as *more* or *less* evolutionary in its ambitions, and to quantify how well a given account succeeds in meeting those ambitions. The results of what follows will, firstly, be a stipulative definition of an ‘evolutionary account of legal change.’⁵ For lawyers who are used to definitions that simply re-express a key term using a longer descriptive phrase, the result may not look like a definition at all. It may look more like the tests used to decide, for example, whether a working relationship counts as a contract of employment.⁶ Unlike the legal test for whether a worker is an employee, however, I do not hope that the criteria which determine the use of evolution will definitively or predictably produce an either-or answer when applied to a particular case. My definition does not function like a sign that says ‘you must be this tall to ride.’ The result is however intended to be more than just an indication of what I am talking about in this dissertation. My purpose in using an inductive method has been to give clear expression to a category that has informed the work of many scholars in their efforts to understand legal change. My hope is that the result would be recognizable to those who have sought to construct evolutionary accounts, as well as among those who have acknowledged but ultimately rejected the feasibility or propriety of an evolutionary jurisprudence. In accordance with Wittgenstein’s maxim that ‘the meaning of a word is in its use,’ the proposed criteria draw from examples of how ‘evolution’ is used: what it is associated with and ascribed to, and what determines the appropriateness of referring to or drawing on it in certain contexts. The method bears meaningful resemblance to the approach adopted by Hart, himself inspired by Wittgenstein, as he developed his concept of law. I too am engaged, as Hart put it, in a kind of ‘descriptive sociology.’⁷

Fulfilling this agenda, however, has forced me to overcome a number of obstacles. The first is the risk of hypostatization or reification. Evolution’s current identification with a putatively objective referent, namely the process that guides the origin, transformation and propagation of biological species, endows the concept with a durable ‘thing’-ness.

⁵ A stipulative definition, in the sense I am using it here, is a definition that is stipulated, as in the phrase ‘by which I mean...’ It serves as an instruction of how a key term should be understood for a specific purpose, rather than making a claim to general conventionality or rectitude. Anil Gupta, ‘Definitions’ in Edward N Zalta (ed), *The Stanford Encyclopedia of Philosophy* (Summer 2015 edn, 2015).

⁶ Davidov has provided a useful review of debates regarding these tests. Guy Davidov, ‘The Three Axes of Employment Relationships: A Characterization of Workers in Need of Protection’ (2002) 52 U Toronto LJ 357.

⁷ HLA Hart, *The Concept of Law* (Clarendon Press 1972) v.

Legal scholars frequently endorse the belief that while '[e]volution, natural selection and adaptation are theories ... the processes to which they refer also are facts.'⁸ Whether evolution, as used in biological contexts, names a real process with clearly identifiable cases is a question whose metaphysical complications need not be addressed here. For those willing to accept that the evolution of biological phenomena describes an objective phenomenon, 'out there' in the world and empirically distinguishable, debates over evolution no longer turn on the ambiguity of a word but are disagreements about the nature of a process discoverable through scientific inquiry. When it comes to legal evolution, by contrast, the existence or reality of the underlying concept is very much in play. Hart in the pursuit of his project had a distinct advantage over mine: he had at his disposal a set of empirical phenomena that could be definitively identified (at least by some imputed 'we') as 'legal.' People may have criticized Hart for various things: seeking answers in the wrong places, or using the wrong means, or generalizing too broadly, but few have criticized his conclusions on the basis that 'law' as such does not exist. With accounts of legal evolution however, it is broadly if tacitly acknowledged that recognizing or establishing the reality of legal evolution would be a product of the inquiry, not its starting point. The sources that I have canvassed have taken legal evolution less as a phenomenon in need of proper description, than as a jurisprudential ambition. The goal is not a theory of legal evolution, but an evolutionary theory of legal change.

The second issue is that legal evolution, unlike law, is only one offshoot of a broader concept. As mentioned in Part I below, the use of 'evolve' and 'evolution' to describe various forms of movement is traceable to the sixteenth century. Those usages could be and occasionally were applied to legal materials. But evolution became a full-throated *concept* only in the nineteenth century, under the combined influence of Charles Darwin and Herbert Spencer. The original idea of law's evolution was not cut from whole cloth, but was substantially derived from that nineteenth-century innovation. One cannot make sense of what scholars are trying to do when they speak of law's evolution without having a sense of evolution's broader usages and connotations. Scholarship often takes for granted that the reader will understand why evolution is the right word, or will make claims that are tied to its meaning. Recovering a clear sense of legal evolution is bound up with the task of understanding what evolution per se is taken to stand for.

⁸ William H Rodgers Jr, 'Where Environmental Law and Biology Meet: Of Pandas' Thumbs, Statutory Sleepers, and Effective Law' (1993) 65 U Colo L Rev 25, 35.

Even when methodological perspectives are expanded to account for evolution proper, there is yet another source of error: the assumption that evolution itself has a unitary, stable, or self-evident meaning. The discussions below reveal just how incorrect this position is. ‘Evolve’ and its derivatives (‘evolution,’ ‘evolutionary’) carry an array of implications that are wide enough to encompass completely contradictory tendencies. As will be clarified in Part I, evolution is a Janus-faced word whose core meanings range from orderly development to capricious mutation, and whose connotations draw together unilineal optimization with relentless diversification. Law, much more than biology, retains both of these major valences.

As such, the method I have followed is genealogical. The chapter’s structure reflects the result: the first part after this introduction provides a historical narrative of evolution’s semantic transformations, offering a picture that is roughly divided into two distinct periods, the first fifty years following the publication of Darwin’s *Origin of Species* in 1859, the second in the twentieth-century rise of the neo-Darwinian synthesis. Part II traces a first meaning of ‘legal evolution,’ noting its ties to a nineteenth-century concept of evolution identifiable above all with the work of Spencer. In Part III, I drill down on a more scientific sense of legal evolution, connected to the full blossoming of Darwinism in the twentieth century, upon which the criteria are based.

Here, I elaborate some of the key findings this chapter in broader strokes:

- i. The Victorian-era concept of evolution, occasionally associated with Darwin but primarily attributable to Spencer, sought to express a universal law of progress, in which wholly material causes, knowable through positive science, moved various phenomena from worse toward better forms, under the purgative pressures of an unforgiving environment. Into the early twentieth century, discussions of legal evolution were, under this concept’s influence, concerned with tracing the implicitly unitary pathway of law’s ‘normal’ development and identifying factors that could lead law away from this ‘natural’ trajectory.
- ii. The ascendance of the Darwinian synthesis in evolutionary biology during the twentieth century led to the consolidation of today’s most familiar concept of evolution. The contemporary concept disclaims the earlier connotation of a world arranged into a hierarchy of forms, turns primarily on the operation of natural selection, and calls off the search for normal trends and narratives of progress. In the 1960s and 1970s, this reinvigorated concept of evolution influenced the social and the behavioural sciences and inspired a renaissance of self-styled evolutionary thought in law starting in the late 1970s.
- iii. An increasingly influential tradition of legal scholarship has sought to re-found explanations of legal form, critiques of law’s effectiveness, and practical guidance for law-making in biologically-rooted models of human cognitive capacities and

behavioural tendencies. The appeal to evolution in such accounts provides an origin story for what is ultimately a static, naturalistic model of human psychological traits. Owen Jones, for example, has suggested that the ‘deep structure’ of law, including family law, contracts and property, is a functional reflection of the ‘signature of the human brain.’⁹ Although such accounts sometimes seek to explain aspects of normative orders that reoccur across multiple contexts, they do not invoke evolution to explain or account for legal change. As such, this tradition is not explored in depth in this chapter.

- iv. Finally, a rich body of scholarship has sought to use the findings of evolutionary biology not to make claims about the biological development of human organisms and its consequences for social relations, but rather ‘by analogy.’ Evolution in such accounts is something that happens *to* law, rather than being a biological process that shapes humanity’s legal needs or limits law’s functions. In large part, however, the analogy is a loose one. It is not universally, or even generally, the case that accounts of legal evolution use the Darwinian synthesis as a universal index that will capture laws, their environment, and interactions between them just as easily as it does biological change, so long as the right mapping between elements can be identified. Instead, such appeals to evolution in jurisprudence operate at a higher level of abstraction. A close reading from a broad cross-section of examples shows that, roughly speaking, evolution is invoked where jurists want to promote a universally valid, naturalistic, empirically tested, rule-based account of legal changes as a cumulative, emergent outcome of the operation of given mechanisms.

Two important themes are collected in Parts IV and V. Though the use of evolutionary theory, Darwinian or otherwise, is not a *sine qua non* of evolutionary accounts of legal change, a significant number of scholars do believe that reliance on evolutionary theory is either a defining feature of evolutionary accounts or, more commonly, that evolutionary theory is essential to vindicate the ambition of creating an evolutionary account. In light of the contributions made by evolutionary theory to the arguments explored and developed in later chapters, Part IV describes the parts of evolutionary theory that these scholars borrow, explains how such theory is applied by these scholars, and warns against some of the missteps that are made when drawing on ideas with widespread vernacular meanings.

Part V, by contrast, discusses some of the reasons that it is useful to be aware of the fraught history of the concept of evolution as reflected in current usage. In particular, I point out that the common conflation and blending of the two meanings leads to faulty conclusions about whether evolutionary processes are associated with progress.

⁹ Owen D Jones, ‘Proprioception, Non-Law, and Biolegal History’ (2001) 53 Fla L Rev 831, 859, 874.

I. Evolution's Meaning and Significance beyond Law: Origins and Key Distinctions

A. Two Meanings of Evolution: A Quick Overview

Evolution is not just a complicated, semantically overburdened concept but is, even more sharply, a contranym: at certain levels of generality, some of its meanings contradict one another. In its more precise, biological sense, evolution references a process that is messy, indifferent, and ruled by chance. Yet in a vernacular sense, it is identified with processes that are structured, salutary, and guided toward an end. Ironically, these two meanings have a shared origin, which ties together the biological theories of Charles Darwin and the social philosophy of Herbert Spencer.

In the remainder of this part, I use a genealogical method, filling out and contrasting these two meanings by exploring their interconnected historical origins. The key results of those explorations are two-fold. First, the older meaning of evolution, tied to a Victorian 'evolutionary social theory' most identifiable with the work of Herbert Spencer, is rooted in a concept that sought to combine two contradictory tendencies. Evolution, in this Victorian usage, shared with 'progress' the sense of an inevitable, eventual movement from the inferior toward the superior, of the worse toward the better and, more specifically, invoked a cosmology containing a continuum of forms that are related to each other by descent and produced through adaptation to environmental conditions. The core contradiction in the Victorian meaning is that this sense of inevitable progress is linked with a wholly scientific, materialist mindset that not only disclaims any reliance on a higher power or immanent purpose but, especially in human affairs, generally denies a role for reason in the process as well.

The other concept, associated with the neo-Darwinian synthesis in evolutionary biology, is rather different. The processes it refers to generate and support a diversity of forms, not just an increase in complexity; the forms that result from evolution cannot be linearly ordered; the variations that are successful are never a perfect fit for their niche; and the central principle of action is serendipity.

B. A Genealogy of 'Evolution' since 1750

The word evolution is etymologically rooted in the Latin for 'an unfolding' or 'an unrolling,' as in the unfurling of a text written onto a scroll, and almost since its first entry into English, it has been used to express a range of meanings that apply this sense

metaphorically. Even in contemporary usage it can refer to any internal movement from one shape to another, with a particular emphasis on a series of intermediate steps, or to the release or emission of something from a container, or, in a small number of cases, to any kind of motion at all.¹⁰

By the early seventeenth century, this unrolling notion was being adapted to describe processes of realization, perfection, or completion. This early modern sense could denote an already-present potentiality being realized, an actuality being revealed, or processes coming to a prefigured culmination.¹¹ In the ‘sciences of the spirit,’ what we might today call the human sciences, such a usage was rare before the nineteenth century.¹² Once it made its way into thinking about human societies and their histories, evolution could describe a movement through a series of preordained epochs, successive iterations of a single design, or the gradual elaboration and extension of one or more principles into a whole system of knowledge.¹³ None of these grand visions were described (or even describable) as *evolutionary*, however. Evolution simply referenced the elaboration of an immanent logic of change or movement, or the manifestation of that logic in historical time.¹⁴

The most striking contrast between this early modern meaning and today’s dominant usage occurs in the what we now call embryology, but was then a part of natural history. The great irony of evolution coming to label Darwin’s theory of the transmutation of species is that, until the middle of the nineteenth century, the dominant use of evolution in natural history excluded the possibility of the kinds of fundamental transformation that Darwin’s theory seeks to explain.¹⁵ In particular, at the end of the eighteenth century, many natural historians understood the growth of an organism from an embryo to its mature form in terms that closely tracked evolution’s root meaning, namely as a process in which an already-present whole expanded to take on a prefigured form, with any

¹⁰ See senses 1.a, 2.a, 4.a, 4.b 11 in ‘evolution, n.’ (*OED Online*, December 2018) <www.oed.com/view/Entry/65447> accessed 7 February 2019.

¹¹ Raymond Williams, *Keywords: A Vocabulary of Culture and Society* (New Revised, Oxford University Press 2015) 78–79; Peter J Bowler, “The Changing Meaning of “Evolution”” (1975) 36 *Journal of the History of Ideas* 95, 95–96.

¹² *Contra* Williams (n 11) 78–79.

¹³ See quotations from More, Cudworth, Johnson, Coleridge and Wyvill in senses 3.a, 6.a, 6.b and 7 of ‘evolution, n’ (n 10).

¹⁴ Figurative uses also included reference to the procession of events through time. As Bowler points out, this usage was generally informed by an implicit notion of some organizing principle guiding that sequence. Bowler, “The Changing Meaning of “Evolution”” (n 11) 99.

¹⁵ Williams (n 11) 79–80.

changes in outward appearance occurring despite a fundamental immutability of inherent structure.¹⁶ ‘Evolve’ was originally no more than a verb that seemed appropriate to describe that process.¹⁷ That being said, by the early nineteenth century, ‘evolution’ and ‘development’ had both come to serve as labels for any process, no matter how conceived, by which an individual organism starting as a simple, homogenous mass becomes an articulated, differentiated, and complex form.¹⁸ In embryology, however, *evolutionists* continued to refer almost exclusively to those who subscribed to a perspective that is totally incompatible with present understandings.¹⁹ Their account of embryological evolution was developed so as to square with a worldview that was stridently opposed to the possibility of species-level change and especially with the premise that new species might come into being.²⁰ Instead, such evolutionists understood the mature organism and the ‘germ’ from which it grew as instances of a single species-form in different degrees of compaction, a form that is both divinely ordained and incapable of change.²¹

Contemporary senses of evolution are by contrast bound up with theories of how biological species are created, propagated, and above all transformed through processes of natural selection. The influence of neo-Darwinism on uses of evolution cannot easily be overstated. As evolution gradually came to be identified with the theory of natural selection, use of the term in biology lost its association with the realization of an intrinsic nature or the fulfilment of a prior design,²² leaving the primary forms of action or movement expressed by evolution completely at odds with its root meaning. To say a thing evolves is to evoke either a continuous and, in the long term, potentially total transformation of that thing’s character, or a thing’s emergence from an inchoate and amorphous assemblage into a more definite form.²³

More fundamentally, evolution after Darwin ceased to be just the noun form of an action (as in, ‘the evolution of her argument’) or a step in a process (as in, ‘this television is an

¹⁶ *ibid* 79; Bowler, ‘The Changing Meaning of “Evolution”’ (n 11) 96–97.

¹⁷ Bowler, ‘The Changing Meaning of “Evolution”’ (n 11) 97.

¹⁸ *ibid* 97–100.

¹⁹ See eg CO Whitman, ‘Bonnet’s Theory of Evolution’ (1895) 5 *The Monist* 412.

²⁰ Peter J Bowler, *Evolution: The History of an Idea* (25th anniversary edn, University of California Press 2009) 45–47.

²¹ *ibid* 40–43, 63–65.

²² Williams (n 11) 79–80.

²³ Senses 7.a & 9 in ‘evolution, n’ (n 10).

evolution in home entertainment’).²⁴ It now served primarily as an abstract noun denoting a free-standing concept. In biology in particular, the use of evolution to denote a kind of action has been almost entirely abandoned. Though there are controversies over the details, advocates and critics of the modern synthesis agree that species emerge, transform, diverge, and disappear primarily via the transmission of genetic material across generations, by the introduction of variations in that genetic material through random mutation, and through the differential reproduction of organisms with different genotypes under prevailing environmental constraints.²⁵ And rather than just referencing the unfolding of this process, evolution now names that process, that is to say, the process described by the theory.²⁶

Left unexplained by this chronology is how that concept came to be called evolution. The widespread use of evolution to discuss theories of modification with descent and the transmutation of species did not occur until the latter half of the nineteenth century.²⁷ Indeed, Darwin did not use the term in the *Origin of Species*.²⁸ From the perspective of the 1850s, this is completely unsurprising, given that the dominant association of the term in biological circles was with theorists who denied the possibility that species could change at all, as noted above.²⁹

Although the details of that reversal are not a direct aim of this chapter, the broad outlines have important ramifications for contemporary usages outside of biology, especially in jurisprudence. The key is that Darwin’s theories only came to be called evolution via the mediation of a third, and by today’s standards rather alien, meaning, which had its heyday in Victorian-era evolutionary social theory identifiable above all with Herbert Spencer.

²⁴ Sense 7.b in *ibid.*

²⁵ For pithy accounts of the modern synthesis, combining Darwinian natural selection and Mendelian genetics, and of the criticisms of that paradigm, especially Steven Jay Gould’s criticisms of strong adaptationism, see Bowler, *Evolution* (n 20) chs 9–10.

²⁶ One species is not ‘an evolution’ of another, but its descendant. Evolution is the process by which one descends from another.

²⁷ Bowler, ‘The Changing Meaning of “Evolution”’ (n 11) 100.

²⁸ Though ‘evolve’ is the last word of *The Origin of Species*, evolution appears nowhere in the original text and did not figure in the initial debates over the book. Bajema & Carneiro in Derek Freeman and others, ‘The Evolutionary Theories of Charles Darwin and Herbert Spencer [and Comments and Replies]’ (1974) 15 *Current Anthropology* 211, 221, 223; Bowler, ‘The Changing Meaning of “Evolution”’ (n 11) 103–05.

²⁹ To get a sense of how odd it is that evolution came to be the name for Darwin’s ideas, we might imagine a counterfactual present in which the modern, post-realist legal consciousness of today’s United States continued to be called ‘formalism,’ in continuity with the jurisprudential orientation it overcame in the late nineteenth and early twentieth centuries.

Spencer's understanding of evolution certainly resonated with the teleological uses of the term in the eighteenth-century human sciences.³⁰ But it was not inspired by them. It was instead an expansive adaptation of a meaning borrowed from the embryological uses discussed above.³¹ At root, his usage is attributable to the naturalist Karl Ernst von Baer, who characterized the growth of the embryo as a tendency from the homogenous toward the heterogeneous.³² Drawing from Carpenter's interpretation of von Baer, Spencer developed the idea that this concept could also characterize the progression of organisms up 'the scale of creation' observable in the fossil record.³³ Spencer's understanding radically expanded Carpenter's homology between embryological development and the phylogeny of species, describing the movement from homogenous to heterogeneous as a universal law of progress,³⁴ one applicable at every scale: individual organisms, the entire order of species, human societies, or indeed the entire solar system.³⁵ As early as 1857, Spencer began using evolution to refer to the unfolding of progress, as he had defined it, at any scale and in every domain.³⁶ As he developed his synthetic philosophy, Spencer further characterized this 'law' by assimilating Coleridge's idea that the 'progress' of species involved an increasing degree of integration and interdependence of parts.³⁷ More relevantly, its name changed. Rather than describing the manifestation of 'progress,' defined as a movement from 'the simple into the complex,'³⁸ evolution became a synonym for progress preferred by Spencer both for its closer connection with the idiosyncrasies of his own theories and for its weaker associations with social change alone.³⁹ The core principle of his doctrine, the notion of 'change from an indefinite, incoherent homogeneity, to a definite, coherent heterogeneity; through continuous

³⁰ Above, text to nn 11–13.

³¹ Above, text to n 18.

³² Note that Von Baer was not an *evolutionist* in the sense discussed above, text to nn 19–21.

³³ Peter J Bowler, 'Herbert Spencer and "Evolution"—An Additional Note' (1975) 36 *Journal of the History of Ideas* 367; William Benjamin Carpenter, *Principles of Physiology, General and Comparative* (3rd edn, J Churchill 1851) 574–83. Spencer himself attributed his approach directly to von Baer, but he likely borrowed his interpretation from Carpenter. Valerie A Haines, 'Is Spencer's Theory an Evolutionary Theory?' (1988) 93 *American Journal of Sociology* 1200, 1208; Bowler, 'The Changing Meaning of "Evolution"' (n 11) 107–08.

³⁴ Spencer used the term 'generic.' Fred Wilson, 'Review of *The Philosophy of Herbert Spencer*' [2008] *Notre Dame Philosophical Reviews*.

³⁵ Herbert Spencer, *Progress: Its Law and Cause: With Other Disquisitions, Viz.: The Physiology of Laughter: Origin and Function of Music: The Social Organism: Use and Beauty: The Use of Anthropomorphism* (New York: J Fitzgerald & co 1881).

³⁶ *ibid.*

³⁷ Michael Taylor, *The Philosophy of Herbert Spencer* (Bloomsbury Publishing 2010) 61–63.

³⁸ Spencer (n 35) 234.

³⁹ Bowler, 'The Changing Meaning of "Evolution"' (n 11) 108–09.

differentiations and integrations,' became not only the proper characterization of progress, but also the 'law of evolution.'⁴⁰

This sequence of lateral borrowings tells only half the story of how the modern concept of evolution was fabricated, however. The remainder lies not in the structure of Spencer's philosophy but more in the ideas he was attempting to synthesize. Spencer's philosophizing ended up shaping the meaning of evolution in modern biology because his writing during the late 1850s and 1860s consistently described the transmutation of species through environmental adaptation as an example of his 'law of evolution.' Spencer's advocacy for the transmutation-through-adaptation position was no innovation. Like Darwin, Spencer was a late entry to a lineage of thinkers who believed that the tree of life had been produced through modification with descent.⁴¹ Neither was Spencer's understanding of transmutation superior to Darwin's: to the contrary, his Lamarckian account of its underlying mechanisms was largely refuted near the turn of the twentieth century.⁴² Nonetheless, through much of the latter half of the nineteenth century, Spencer was not just the philosopher of evolution par excellence but possibly *the* leading intellectual on both sides of the Atlantic.⁴³ His renown crested during a moment when the transmutation hypothesis was slowly gaining acceptance but the nature of the mechanisms driving the process were much more up for debate than they are today.⁴⁴ Whether because of their partiality for the kind of progressivism that was central to Spencer's account, but mostly absent from Darwin's,⁴⁵ or simply because Spencer's eminence made his usage so well-known, by the 1870s biologists had almost universally adopted Spencer's category as a synonym for the transmutation hypothesis.⁴⁶

⁴⁰ Taylor (n 37) 63, citing Spencer's *First Principles*.

⁴¹ Contrary to received wisdom, Darwin was not the first to introduce that position. Nisbet laments that it seems 'scholarship will never rid the world of this gross misconception.' Robert A Nisbet, *History of the Idea of Progress* (Heinemann 1980) 174. On the array of precursors who supported modification with descent, including most famously Lamarck but also Darwin's grandfather Erasmus, see Bowler, *Evolution* (n 20) chs 3–4. Hovenkamp is thus correct, but only in this narrow sense, that '[t]here were prominent evolutionists a century before Darwin.' Hovenkamp, 'Evolutionary Models in Jurisprudence' (n 3) 645–46. Among those familiar with the history, Darwin is nonetheless acknowledged as the author of 'the theory of evolution' for having identified the mechanism, natural selection, by which transmutation of species could occur. Though Alfred Russel Wallace published an account that mirrored Darwin's key claims concurrently with the publication of *The Origins of Species*, Bowler argues that fair credit for our modern conception of natural selection nonetheless lies with Darwin. Bowler, *Evolution* (n 20) 173–75.

⁴² Freeman and others (n 28) 216–17; Bowler, *Evolution* (n 20) 251–73.

⁴³ Thomas Hylland Eriksen and Finn Sivert Nielsen, *A History of Anthropology* (Pluto Press 2001) 37.

⁴⁴ On the relative 'eclipse of Darwin' between the 1860s and the opening of the twentieth century, see Bowler, *Evolution* (n 20) ch 7.

⁴⁵ Freeman and others (n 28) 213–15, 218–19.

⁴⁶ Bowler, 'The Changing Meaning of "Evolution"' (n 11) 109–10, 111–12.

This may be enough to explain contemporary use among biologists. We might conjecture that all that matters for usage in biology was the ascendance of the view that the phylogenetic tree has been produced through gradual adaptations and that modification with descent occurs through natural selection. It is possible that the name which is attached to that view is irrelevant. It may be that scientists are less liable to be misled by semantics, so that what matters is never the name of concepts, but only ever the correspondence of their meanings, narrowly conceived, with the world that they are supposed to capture. Among professionals, it could be that the history of evolution's meaning can be set aside because scientific understandings of evolution have since expelled any sense of progress.⁴⁷ Perhaps.⁴⁸

On leaving the relatively tight confines of academic biology, however, a different picture emerges.⁴⁹ Spencer's eminence during the genesis of Darwinism means that his ideas continue to be consequential for how evolution is used and understood today. However, it is no accident that Spencer's writings have not stood the test of time, and it is important not to get trapped in the troughs and trenches of his system.⁵⁰ Consider a typical quote:

Evolution does not imply a latent tendency to improve, everywhere in operation. There is no uniform ascent from lower to higher, but only an occasional production of a form which, in virtue of greater fitness for more complex conditions, becomes capable of a longer life of a more varied kind. And while such higher type begins to dominate over lower types and to spread at their expense, the lower types survive in habitats or modes of life that are not usurped, or are thrust into inferior habitats or modes of life in which they retrogress. What thus holds with organic types must also hold with types of societies.⁵¹

⁴⁷ Michael Ruse, *Monad to Man: The Concept of Progress in Evolutionary Biology* (Harvard University Press 2009).

⁴⁸ However accurate this account may be today, things had not yet become quite so clear as late as 1975. Bowler, "The Changing Meaning of "Evolution"" (n 11) 112–13.

⁴⁹ As Ruse concludes from a broad survey of pop science books and museum exhibits on evolutionary biology: 'let there be no mistake that at the popular level, which for most people is the beginning and the end of their acquaintance with evolution, Progress continues to ride high.' Ruse (n 47) 526–30.

⁵⁰ The rhetorical structure of Crane Brinton's infamous question 'Who now reads Spencer?' showed in 1933 how far Spencer's star had already fallen. Parsons' infamous quotation of Brinton in his 1941 *The Structure of Social Action* renders his own addition, that 'Spencer is dead,' rather redundant. See Taylor (n 37) 147; JW Burrow, *Evolution and Society: A Study in Victorian Social Theory* (Cambridge University Press 1966) xii.

⁵¹ Herbert Spencer. *The Principles of Sociology*, vol. 3. (New York: Appleton 1897) 609, quoted in Haines (n 33) 125.

The confusion evident here is typical of Spencer: the indicia of superiority quietly slips from fitness in a specific environment to overall fitness; fitness with a particular environment is equated with the capacity to inhabit any environment; increased fitness is cavalierly identified with longer life; and he places analytical emphasis on the complexity of the environment, rather than on the complexity of form emphasized by his own definition of evolution.

Nevertheless, this same quotation contains nearly everything that the concept of evolution absorbed under Spencer's influence. It casually associates an overarching process of advancement with a ranking of forms on some intrinsic but unarticulated standard of value, and with the struggle for existence under environmental pressures. It embraces the inevitability of progress, while dissociating that tendency from any latent design, external guidance, or immanent teleology. Put differently, it fuses a conviction that there will be a general development from inferior to superior with an account of adaptive processes that is wholly expressible in terms of natural, mechanistic causes.⁵² It characterizes advancement through adaptation as a *universal* law, applicable both to the order of species and to the organization of human societies.

Modern usage has not retained everything in Spencer's concept. Indeed, some of the implications of his system are very odd.⁵³ In accordance with the prevailing interpretation of nineteenth-century positivism, Spencer was fixated on providing an account of social processes and human experiences that could be directly traced to ultimate, 'necessary' causes.⁵⁴ He sought to account for the law of evolution, regardless of its level of operation, through deductions from the same simple physical laws.⁵⁵ From the perspective of modern biology, natural selection gains nothing from this grand theorizing, and none of Spencer's reasoning on this account has been meaningfully inherited by modern usage. Another look at the above quote lays bare the Social Darwinism of which Spencer has long been identified as the archetype.⁵⁶ In identifying a form's success in the struggle for existence with some intrinsic (moral) superiority, he

⁵² *ibid* 1205–09.

⁵³ For example, he thought even the basic rules of logic could be given causal-empirical explanation; that all *a priori* propositions were synthetic. Burrow (n 50) 208–12.

⁵⁴ *ibid* 204–08.

⁵⁵ Spencer proposed, in particular, that his law of evolution could be logically inferred from the conservation of energy (what he called the 'persistence of force'). Haines (n 33) 1202–03; Burrow (n 50) 194–95.

⁵⁶ Richard Hofstadter, *Social Darwinism in American Thought* (Beacon Press 1955).

echoes his position, articulated a decade before the publication of the *Origin of Species*, that a challenging environment is necessary to generate a continuous sequence of salutary adaptations, both in organisms and in societies.⁵⁷ On its own, a broad faith that the fits and starts of social change divulge an overall tendency to progress delivered through adaptive mechanisms yields very few fixed conclusions about how social or political institutions should be organized.⁵⁸ Today, Social Darwinism is for the most part considered to be only one (mis)application of the evolutionary principle to social organization.⁵⁹

Nonetheless, at an appropriate level of abstraction, the combination of connotations and premises that Spencer brought together constitute a distinct understanding of evolution that continues to mark contemporary usages. It is not quite the case today, as Ruse has proposed, that 'at a popular level, *Progress* and *evolution* are synonyms.'⁶⁰ People generally mean something slightly more specific and less capacious when they talk about evolution. There is, as with progress, the sense of an inevitable, eventual movement from the inferior toward the superior, of the worse toward the better. Yet, evolution fuses this sense of progression or advancement with a cosmology containing a continuum of forms that are related to each other genealogically and produced through adaptation to environmental conditions.

This conception can be expressed even more abstractly, in terms of the attempt to reconcile countervailing metaphysical convictions. The power of Darwin's account of natural selection lay in its capacity to explain both the succession of species that were divulged by the fossil record and the continuing divergence of species observable today, thereby shining a light on change in species over time and accounting for their present-day diversity. Darwin may have vacillated in his belief that natural selection had a progressive tendency, especially in the case of humanity,⁶¹ but his work was largely

⁵⁷ Herbert Spencer, *Social Statics, Or, The Conditions Essential to Human Happiness Specified and the First of Them Developed* (1st edn, John Chapman 1851) 63–65. For this and many other reasons, Social Darwinism is not attributable to Darwin. Bowler has suggested that Social Lamarckism would be a better name. Burrow (n 50) 115; Bowler, *Evolution* (n 20) 297–98, 301.

⁵⁸ Herbert Hovenkamp, *The Opening of American Law: Neoclassical Legal Thought, 1870-1970* (Oxford University Press 2014) 17–22.

⁵⁹ Bowler, *Evolution* (n 20) 297–307.

⁶⁰ Ruse (n 47) 530.

⁶¹ Nisbet (n 41) 175–76; Bowler, *Evolution* (n 20) 143–48, 163–64, 276. Some of Darwin's expressions of belief in evolution's progressive tendencies may have reflected 'truckling' to public opinion to make his theory more palatable. *ibid* 183.

concerned with how organisms find their ecological niche, not where they lie on the great chain of being.⁶² Natural selection *can* generate stable forms that are more complex than their predecessors, where ‘more complex’ has the sense of integrating a larger diversity of interdependent parts, and it has a long record of doing so.⁶³ But there is no logical reason to believe that more complex forms, in this sense, should have a tendency to succeed over others. In fact, the data suggest otherwise.⁶⁴

Whatever the focus of Darwin’s work, and whatever import it may have for modern biological science, his ideas and the credence they lent to the transmutation hypothesis were received in an era dominated by an ideology of progress that placed humanity at the top echelon of life, and cast Europe as the apotheosis of social development.⁶⁵ Though those who counted themselves as evolutionists did not subscribe to the whole of Spencer’s philosophy, his accounts were nonetheless the most popular and well-known interpretation of Darwin’s findings.⁶⁶ Contra Darwin, Spencer’s focus was not on accounting for diversity or the stability of ‘inferior’ forms, but rather on the process purported to move forms ceaselessly ‘up the ladder’ from the inferior to the superior.⁶⁷ In his doctrine of evolution, Spencer believed he had discovered a set of wholly naturalistic, materialist mechanisms driving that process, of which Darwin’s account was only an aspect. Evolution, for Spencer, characterized a course of progress reached through natural, adaptive processes and not, emphatically, involving any exercise or application of reason.

In Spencer’s day, the implications of this were great. If the doctrine of evolution were correct, it would mean that progress could be vindicated without relying on theological intervention, without the presence of a preexisting design to be realized, and without the operation of any immanent principle. If Progress had been a secularization of divine Providence, evolution promised to finally shed Progress’s metaphysical residues.⁶⁸ In Spencer’s hands, evolution depicted a universe that possessed a general tendency toward

⁶² Bowler, *Evolution* (n 20) 170–72.

⁶³ Bowler, ‘The Changing Meaning of “Evolution”’ (n 11) 109.

⁶⁴ Daniel W McShea, ‘Complexity and Evolution: What Everybody Knows’ (1991) 6 *Biol Philos* 303.

⁶⁵ Spencer (n 35) 237.

⁶⁶ Bowler, *Evolution* (n 20) 301.

⁶⁷ *ibid* 275.

⁶⁸ Nisbet (n 41); Hovenkamp, ‘Evolutionary Models in Jurisprudence’ (n 3) 665, 667–68, 671.

the perfection of forms, but did so without having to rely on Aristotelian teleology or any direct, unilinear pathway.

Like many of his contemporaries, Spencer may have relied on an underdeveloped conflation of the relative *complexity* of forms with their intrinsic *superiority*. The alternate name he bestowed on natural selection, the ‘survival of the fittest,’ may have confused the search for appropriate niches in the economy of life with a never-ending increase in vigour and excellence.⁶⁹ He may have, paradoxically, found it necessary to ultimately anchor his whole system in the operation of some metaphysical unknowable.⁷⁰ Nonetheless, Spencer’s doctrine gave his contemporaries warrant to maintain their certainty of Man’s pre-eminence among other species, European superiority over their colonial subjects, and the inevitability of a future better than the present, all while professing to adopt a wholly scientific, positivist, naturalistic, and anti-metaphysical mindset. In the shadow of Spencer’s philosophy, evolution became the name of any doctrine that promised to reconcile that conviction with that mindset via the magic of ‘adaptation.’ We might safely say, within a margin of error, that no one today reads Spencer.⁷¹ But those who think of evolution not just as an engine for the production of stable diversity of life, but as a crane that has lifted man to the top of the tower of time, have inherited a usage that embodies Spencer’s conviction that such a promise could be redeemed.⁷²

II. Victorian-Age Legal Evolution: Revelation, Development and Progress

What have the various jurisprudential ambitions expressed by legal evolution got to do with this genealogy of evolution itself? There have been various efforts over the past forty years in jurisprudence, economics, and the social sciences to replicate neo-Darwinism’s successes in biology, often by borrowing from Darwin and his intellectual descendants. Those efforts receive more direct attention in Part III. However, because contemporary invocations of evolution in legal theory only partially escaped the legacies of Spencer’s

⁶⁹ For Spencer’s coinage of ‘survival of the fittest,’ see Bowler, *Evolution* (n 20) 221.

⁷⁰ Freeman and others (n 28) 215.

⁷¹ See above, n 50

⁷² On popular depictions of evolution as a vertical process with humanity at its zenith, including the ‘tower of time’ see Ruse (n 47) 526–27. The image of evolution as a crane lifting biological designs upward toward ‘excellence’ is found in Daniel C Dennett, *Darwin’s Dangerous Idea: Evolution and the Meanings of Life* (Penguin 1996) 73–80.

usage, it is important to begin by reviewing an earlier tradition of legal evolution more directly influenced by Victorian-era evolutionary social theory.

To make sense of this late nineteenth-century tradition, I begin by noting the various traditions of *progressive* jurisprudence that emerged out of the Enlightenment. Lord Mansfield's oft-referenced description of the common law 'work[ing] itself pure by rules drawn from the fountain of justice' is only the most famous.⁷³ Natural law thinking at least as far back as Thomas Aquinas had emphasized the existence of norms discoverable and determined by reasoned contemplation of the nature of Man,⁷⁴ with perdurable controversies about how such norms related to civil laws and the law of nations.⁷⁵ After the German idealists, though, an increased emphasis was placed on the idea that the gradual discovery of such norms through reason worked as an immanent historical process.⁷⁶ The German historical school, identified with Savigny, Gierke, and Jhering, understood the development of a society's laws as an organic emanation of the spirit of its people and an immanent product of their shared history.⁷⁷ In an very different vein, Adam Smith is only the best-remembered of eighteenth-century social theorists who sought to frame law's development primarily in terms of the movement of societies through a predetermined series of economic stages.⁷⁸ Informed by clashes between English adherents to the German historical school and the analytical jurisprudence of Bentham and Austin, JF McLennan and Henry Sumner Maine proposed that, in spite of dissimilar origins and persistent differences between specific bodies of law, law as such, at least law in 'advanced' societies, develops toward a single apotheosis.⁷⁹

Some of these theories of law and legal change were embedded in a broader understanding of history and historical knowledge that might be described as

⁷³ *Omychund v Barker* 1744 (1744) 125 ER 1310.

⁷⁴ Peter Stein, *Legal Evolution: The Story of an Idea* (Cambridge University Press 1980) 3. In Blackstone's formulation '...God...when he created man...laid down certain immutable laws of human nature... gave him also the faculty of reason to discover the purport of those laws.' 1 Bl Com 38-41. On Blackstone's understanding of 'natural law...discoverable by the light of reason' and its relation to the civil laws of states, see JM Finnis, 'Blackstone's Theoretical Intentions' (1967) 12 Am J Juris 163.

⁷⁵ For Grotius and Pufendorf on *ius naturae et gentium*, see Stein (n 74) 3-12.

⁷⁶ Nisbet (n 41) 220-23; Hovenkamp, 'Evolutionary Models in Jurisprudence' (n 3) 646. For Kant's account of a universal history of mankind founded in the realization of a purpose intrinsic in humanity's capacity to reason, see eg Susan Shell, 'Kant's Idea of History' in Arthur M Melzer and others (eds), *History and the Idea of Progress* (Cornell University Press 1995).

⁷⁷ Stein (n 74) ch 3.

⁷⁸ *ibid* 19-50; Adam Smith, *Lectures on Jurisprudence* (Ronald L Meek and others eds, Oxford University Press 1978).

⁷⁹ Stein (n 74) ch 4.

historicist.⁸⁰ Are they *evolutionary*? Hovenkamp has suggested, with reference to many of these Enlightenment-era thinkers, that ‘jurisprudence was “evolutionary” long before Darwin.’⁸¹ As much as the early modern meaning of evolution might suffice to describe the principle of movement in these accounts, using evolution to gather them together entails some lexical anachronism that risks conceptual confusion. ‘Evolve’ and ‘evolution’ appear neither in Smith’s *Lectures* nor in Blackstone’s *Commentaries*. Hegel’s *Philosophy of Right* does not employ the Latin *evolutio*, and his uses of the German *Entwicklung*, occasionally translated in the past as evolution, bear no resemblance to any modern incarnation of the concept.⁸² Jhering’s *Struggle for Law* echoes the German title of Darwin’s *Origin of Species*, but the text has little to say about processes of legal change.⁸³ It is possible that these authors might have found it convenient to use ‘evolve’ to describe the gradual expansion of legal knowledge or movement through stages of legal development, in accordance with its meaning as a synonym for ‘develop.’ Yet, describing their theories or the processes they seek to capture as evolutionary would have been nonsense to any of these thinkers.⁸⁴ None of them would have, or even could have, spoken of ‘legal evolution.’

⁸⁰ An important note: in some branches of history, historicism (sometimes *historism*) is an epithet applied to antiquated historiographies which presuppose a singular, time-spanning substance that somehow gives the whole passage and dynamics of human action a definite (‘historical’) meaning, structure, or trajectory. See P Rossi, ‘Historicism’ in *International Encyclopedia of the Social & Behavioral Sciences* (Elsevier 2001). Yet in others, notably in intellectual history and the history of political thought, historicism (also *contextualism*) has named approaches to history that *reject* the possibility of an epistemological standpoint that would transcend above historical specificity. Mark Bevir, ‘The Contextual Approach’ in *The Oxford Handbook of the History of Political Philosophy* (Oxford University Press 2011). In the first meaning, the ultimate meaning of events is provided by some substance standing above or beneath the specifics of historical experience; the second encourages an epistemological stance that interprets actions and ideas in their specific historical context. For the former applied to legal history see e.g. Stephen A Siegel, ‘Historism in Late Nineteenth-Century Constitutional Thought’ (1990) 1990 Wis L Rev 1431; for the latter, see e.g. Robert W Gordon, ‘Historicism in Legal Scholarship’ (1981) 90 Yale LJ 1017, 1017, n 1 (‘as used here ... “historicism” refers simply to the perspective that the meanings of words and actions are to some degree dependent on the particular social and historical conditions in which they occur’). The critiques developed in Popper’s often-cited text seem based on idiosyncratic usage that assumes these perspectives only ever occur together. Karl R Popper, *The Poverty of Historicism* (Routledge & Kegan Paul 1961). Given these complications, I thus avoid the term in the remainder of this chapter.

⁸¹ Hovenkamp, ‘Evolutionary Models in Jurisprudence’ (n 3) 645–46.

⁸² Georg Wilhelm Friedrich Hegel, *Elements of the Philosophy of Right* (Allen W Wood ed, HB Nisbet tr, Cambridge University Press 1991).

⁸³ Rudolf von Jhering, *The Struggle for Law* (John J Lalor tr, Callaghan 1879).

⁸⁴ Talking about evolution as a principle, force, or process in the late eighteenth century would be akin to talking today about how containment is a key characteristic of eggs, nations, swimming pools, and brains. You might notice that they all ‘contain’ something, but it is a radical jump to think and talk as if that containment is causal or constitutive. If someone asked, for example, ‘What are the important factors in containment? What are the mechanisms of containment? How do our understandings of the mechanisms of containment in one domain map onto its operation in other domains?’ we might conclude that they have not only an idiosyncratic ontology, but a poor grasp of the English language. Uses of the evolution concept

The critiques of such anachronism that are the hallmark of the Cambridge school of contextualism in intellectual history have had a variety of justifications, not all of which matter to my project.⁸⁵ The critique that does concern me here, articulated in the later work of the doyen of the Cambridge school, Quentin Skinner, is that if we are careless about the language that historical figures used, we risk misunderstanding what it was they were doing with that language and thus misconstruing what they were doing more broadly.⁸⁶

Hovenkamp, for instance, falls victim to this hazard by writing as if evolution has a static and self-evident meaning that can be applied from the birth of the Enlightenment to the present. He portrays one long tradition of 'evolutionary' legal change, distinct in detail but unified in theoretical ambition. He locates the only significant milestone in the march of these theories with Darwin, who provided the account that finally made the underlying idea credible.⁸⁷ The name of the idea may have changed in the late nineteenth century but, in Hovenkamp's account, that name change is immaterial. He is hardly alone in these claims.⁸⁸

The error here is that the appearance of the concept of evolution also marked a qualitative turn in legal thinking. It is insufficient to claim, as Hovenkamp suggests, that Darwin simply bolstered the credibility of an already-existing theory of evolution by providing an explanation for it that depended in no way on God, *Geist*, or any other metaphysical substance.⁸⁹ Rather, the genesis of evolution united a preexisting doctrine of progress with a commitment to a radical empiricism that, in the human sciences, more or less embraced Auguste Comte's account of the passage from metaphysical to positivist forms

before Spencer, likewise, would not just have been at odds with scientific understandings, but at odds with what Wittgenstein called *grammar*.

⁸⁵ On the Cambridge school, see generally Bevir (n 80).

⁸⁶ Quentin Skinner, *Visions of Politics* (Cambridge University Press 2002) 60–61.

⁸⁷ Hovenkamp, 'Evolutionary Models in Jurisprudence' (n 3) 645, 647.

⁸⁸ For examples, see Deakin, who also cites a 'long tradition linking legal and evolutionary theory, which predates the writing of Charles Darwin' and Rottleuthner, who does not mention Darwin at all. Deakin, 'Evolution for Our Time' (n 3) 3; Hubert Rottleuthner, 'Theories of Legal Evolution: Between Empiricism and Philosophy of Law' in Eugene Kamenka and others (eds), *Soziologische Jurisprudenz und realistische Theorien des Rechts* (*Rechtstheorie Beiheft* 9, Duncker & Humblot 1986). Hovenkamp, Rottleuthner and Deakin all rely on Stein, whose demarcation of legal evolution as 'theories which claim to explain legal change not merely in historical terms but as proceeding according to certain determinate stages, or in a certain pre-determined manner,' comprises Smith, the German historicists, and the Anglo-American historical school identified with Henry Maine. Stein (n 74) 122.

⁸⁹ Hovenkamp, 'Evolutionary Models in Jurisprudence' (n 3) 647.

of knowledge.⁹⁰ As with Comte, admittedly, the aspiration to displace the metaphysical element in human knowledge was undermined in practice by the invocation of a hierarchical ordering of forms of social life tied to a developmental model of (human) history.⁹¹ Nonetheless, embracing evolution meant rejecting prior doctrines, like Natural Law, German idealism, or German romanticism, that had framed legal change as the discovery of a rational design, the development of an immanent telos, or any sort of ‘progress of the consciousness.’⁹²

Henry Maine presents an illuminating transitional case. Although ‘evolution’ does not appear in his classic *Ancient Law*, Maine did eventually come to describe his theories in terms of a ‘law of evolution.’⁹³ The relevant point here lies not in understanding what Maine did with evolution, but in what evolution allowed people to do with Maine. Maine’s historical method embodied the same reconciliation of commitments advanced by Spencer. *Ancient Law* echoed the German historical school’s premise that law developed organically as an outgrowth of its host society, but tempered that view with a healthy dose of nineteenth-century positivism favouring a scientific, empirically-based study of law.⁹⁴ It thus easily accorded with Spencer’s concept of evolution, uniting a conviction in the inevitability of social progress and Europe’s ‘progressive’ (viz ‘advanced’) character, with an epistemological commitment to attribute any claims about society and social change to temporal, material, and natural laws (but not Natural Law per se). The particular phrasing of Maine’s well-known maxim, that ‘the movement of the progressive societies has been a movement from *Status to Contract*,’⁹⁵ captures the ambiguity of his project. In using a historical analysis of Roman law to construct an account of law’s ‘typical’ developmental path, he seemed on the one hand to be documenting a pattern or a tendency that was discernible in his very small research sample.⁹⁶ Yet his own convictions were clear: the development of Roman law should be studied alongside

⁹⁰ Bowler, *Evolution* (n 20) 100.

⁹¹ Marion Blute, ‘Sociocultural Evolutionism: An Untried Theory’ (1979) 24 *Behavioral Science*; Baltimore, Md 46, 47; Kunal Parker, ‘The History of Experience: On the Historical Imagination of Oliver Wendell Holmes, Jr.’ (2003) 26 *PoLAR: Political and Legal Anthropology Review* 60, 47.

⁹² Hegel’s philosophy included an argument that ‘[w]orld history is the progress of the consciousness of freedom.’ Peter C Hodgson, ‘History and the Progress of the Consciousness of Freedom’ in *Shapes of Freedom: Hegel’s Philosophy of World History in Theological Perspective* (Oxford University Press 2012).

⁹³ Stein (n 74) 99–100.

⁹⁴ David M Rabban, *Law’s History: American Legal Thought and the Transatlantic Turn to History* (Cambridge University Press 2013) 115–16, 121–22; Burrow (n 50) 144–46; Stein (n 74) 87–88.

⁹⁵ Sir Henry Sumner Maine, *Ancient Law* (Cheap Edition, John Murray 1908) 151.

⁹⁶ Rabban (n 94) 117.

modern law, 'not because our own jurisprudence and that of Rome were *once* alike—it is because they *will be* alike.'⁹⁷

Maine's ex-post adoption of evolution was part of the construction of Victorian-era 'evolutionary social thought' in anthropology, sociology and beyond.⁹⁸ As Pollock put it, '[t]he doctrine of evolution is nothing else than the historical method applied to the facts of nature; the historical method is nothing else than the doctrine of evolution applied to known societies and institutions.'⁹⁹ Uses of evolution mirroring Maine's historical method persisted into the early twentieth century. I mention three notable examples.

In their introductory preface to their 1912 edited collection on the evolution of law, Wigmore and Kocourek focused on the diversity of social environments in which law is created and developed and on the diversity of factors that might shape its contents. They emphasized the need to test and verify on the basis of a large corpus of materials, yet their ultimate interest rested in identifying a 'natural law of development of legal ideas.' They considered their inquiry into legal diversity and exceptions to the regular movement through stages germane only insofar as it allowed for the identification of 'extreme discordances which hamper the flow of progress.'¹⁰⁰

Keller, one of the last champions of Victorian-era social evolution, summarized evolution, whether in law or in nature, in terms of a series of forms connected through descent and generated through adaptation to environment; he notably reduced the mechanism of Darwinian evolution to the formula of variation, selection, and inheritance;¹⁰¹ he furthermore dismissed the 'explanatory subterfuge' of ascribing causes to unobservables, whether they be Natural law, natural right, or any kind of higher cause; and, finally, he insisted that he was not confusing evolution with progress. And yet, in accordance with his belief that Spencer, rather than Darwin, was the preeminent philosopher of evolution,

⁹⁷ Henry Sumner Maine, 'Roman Law and Legal Education', *Cambridge Essays* (London, 1856), 1-29 quoted in Stein (n 74) 86-87.

⁹⁸ Rabban (n 94) 115.

⁹⁹ Stein (n 74) x.

¹⁰⁰ Albert Kocourek and John H Wigmore, *Evolution of Law: Select Readings on the Origin and Development of Legal Institutions* (Little Brown 1918) vol 3, vii-x.

¹⁰¹ On this modern 'formula' for natural selection, see below, text to nn 121, 186-188 and Chapter 3. Campbell, who is often credited with introducing the formula to the modern study of socio-cultural evolution, attributes this formulation to Keller. Donald T Campbell, 'Variation and Selective Retention in Socio-Cultural Evolution' in Herbert R Barringer and others (eds), *Social Change in Developing Areas: A Reinterpretation of Evolutionary Theory* (Schenkman Publishing Company 1965) 22-23.

both generally and in the analysis of societies, he took legal evolution to imply growth, a 'cosmic tendency,' and orderly development.¹⁰²

Paul Vinogradoff, Maine's successor as Chair of Jurisprudence at Oxford,¹⁰³ nominally identified the doctrine of evolution with Darwin. Yet he ascribed its legal application to the anthropological effort to formulate 'normal sequences of development or ... empirical laws of jurisprudence,' as well as with the sociological perspectives of Comte, Jhering, and Spencer. In his unfinished *Outlines of a Historical Jurisprudence*, he sought to construct the foundations of an account that would transcend or vindicate the work done by these earlier 'evolutionists.' Yet in his attempt to travel a middle way between accounts portraying legal change as the unfolding of a project to achieve social purposes, and those that identified particular laws as reflection of their social context, he too foundered.¹⁰⁴

As will be elaborated in the next section, over the past forty years, the connotations given to evolution in legal scholarship have come to express a scientific ambition modelled on the successes of Darwinian accounts of biological evolution. While it would be wrong to say that all such usages secretly or subconsciously embrace a social teleology, there are often signs that the teleological worldview lying behind Spencer's usage continues to haunt today's more explicitly Darwinian accounts.

III.A Scientific Turn for Legal Evolution: Naturalism, Mechanism and Emergence

Was legal evolution, then, an 'essentially a nineteenth century phenomenon,' as Peter Stein suggested in his oft-cited 1980 monograph?¹⁰⁵ If we were to be generous with the boundaries of the nineteenth century, and to limit our attention only to legal theory that echoed Maine's synthesis of progress and positivism, we could grant Stein his point. For much of the period stretching from the 1920s to the 1970s, legal theory in the United States and the United Kingdom moved away from explicit invocations of 'evolution' and from historical methods more broadly.¹⁰⁶ Indeed, self-styled evolutionary approaches to

¹⁰² AG Keller, 'Law in Evolution' (1919) 28 Yale LJ, 722–74.

¹⁰³ Stein (n 74) 115–16.

¹⁰⁴ Paul Vinogradoff, *Outlines of Historical Jurisprudence* (Oxford University Press 1920) vol 1, 157–60; Stein (n 74) 117–19.

¹⁰⁵ Stein (n 74) 122.

¹⁰⁶ Elliott (n 3) 59. Though this is not the place to enter into a robust exploration of the reasons for this lull in evolutionary legal theory, I can provisionally point to its displacement by economic marginalism (per Hovenkamp), to evolution's association with an increasingly unpopular social Darwinism (per Clark), or to

socio-cultural change not only became outmoded but were explicitly rejected by many social scientists during the same period.¹⁰⁷ There were important exceptions, however. Research in legal sociology and law and society continued to invoke evolution in efforts to construct reliable indices, legal or otherwise, in the ontogeny of ‘society,’ with individual societies understood as instances of a single kind of entity in different stages of development.¹⁰⁸ Habermas’s social theory likewise provided an account of social evolution that subsumed continuous changes in both social structure and worldview into a developmental logic with a built-in sense of normative progress, thereby rehashing Spencer’s historicism while seeking to vindicate a breed of Kantian historical rationalism.¹⁰⁹ For the most part, though, ‘evolution’ was little more than a minor theme in legal scholarship. From Stein’s vantage point, evolution seemed to have passed out of view.

Yet starting in the 1980s, ‘evolution’ began to make a gradual comeback in jurisprudence and legal analysis, and it bore little resemblance to Stein’s ‘nineteenth century phenomenon.’ This revival had a complex pedigree.

Broadly speaking, it was likely fuelled by a growing public enthusiasm for evolutionary thinking, epitomized by Dawkins’ *The Selfish Gene*, whose breakout success provided the public with a lucid, accessible account of Darwinian evolution via genetic natural selection.¹¹⁰

This revival also drew from a number of antecedent intellectual traditions that had themselves been shaped by careful adaptations of Darwinian models. It was traceable, for one, to two sets of theories in economics. The first, identifiable with an argument first

the rise of liberal meliorism and Progressive-era social-policy focus, what Kennedy calls ‘social’ as contrasted to the earlier ‘classical’ legal consciousness. Hovenkamp, *The Opening of American Law: Neoclassical Legal Thought, 1870-1970* (n 58) 3; Elliott (n 3) 59, n 142; Duncan Kennedy, ‘Three Globalizations of Law and Legal Thought: 1850–2000’ in David M Trubek and Alvaro Santos (eds), *The New Law and Economic Development* (Cambridge University Press 2006).

¹⁰⁷ See Campbell (n 101) 23–26.

¹⁰⁸ For sociology of law, see eg Schwarz and Miller, who understand ‘evolution’ as movement through a sequence of changes undergone by all societies. Richard D Schwartz and James C Miller, ‘Legal Evolution and Societal Complexity’ (1964) 70 *American Journal of Sociology* 159; Howard Wimberley, ‘Legal Evolution: One Further Step’ (1973) 79 *American Journal of Sociology* 78. For law and society, see Nonet and Selznick, who use legal evolution as a synonym for the development of law through repressive, autonomous, and responsive stages. Philippe Nonet and Philip Selznick, *Law and Society in Transition: Toward Responsive Law* (Harper & Row 1978).

¹⁰⁹ See generally Michael Schmid, ‘Habermas’s Theory of Social Evolution’ in John B Thompson and David Held (eds), *Habermas: Critical Debates* (Macmillan 1982). For parallels with Spencer *ibid* 176–77, 305 n 58.

¹¹⁰ Richard Dawkins, *The Selfish Gene* (1st edn, Oxford University Press 1976). On the genesis of sociobiology and Dawkins’ ‘ultra-Darwinism,’ see Bowler, *Evolution* (n 20) 356–61.

made by Armen Alchian, sought to characterize the prevailing structure of business organizations as an evolutionary outcome of market competition.¹¹¹ The other, traceable to Friedrich Hayek, attributed the fundamental underpinnings of market order as the output of cultural evolution via group selection.¹¹²

The revival of evolutionary approaches to law also had links to a revamped interest in the evolutionary bases of behaviour, especially human behaviour, which had made headway in the 1960s and 1970s.¹¹³ Hamilton, for instance, provided the first plausible arguments for the genetic sources of pro-social, including altruistic, behaviour in animals.¹¹⁴ Maynard Smith used game theory to explain the evolution of behaviours.¹¹⁵ By his coinage of 'sociobiology,' EO Wilson gave a conspicuous label and a unified theme to previously disparate strands of research, helping to synthesize a field whose 'central problem' was to explain how altruistic behaviour can arise through natural selection operating at the level of the genotype, but whose tools he extended to explain various common features of human behaviour.¹¹⁶ Wilson's Pulitzer-prize winning book, *On*

¹¹¹ Armen A Alchian, 'Uncertainty, Evolution, and Economic Theory' (1950) 58 *Journal of Political Economy* 211. The idea that the prevalent structures of economic order are the unique outcome of a competitive process among alternatives, with new forms continually produced by innovations in contracting structure and business strategies, and where survivors are selected according to their ability to minimize the aggregate costs of production and consumption, is an idea with an extremely prolific pedigree. Notable examples include Eugene F Fama and Michael C Jensen, 'Agency Problems and Residual Claims' (1983) 26 *JL & Econ* 327; Henry Hansmann, *The Ownership of Enterprise* (The Belknap Press of Harvard University Press 1996).

¹¹² See especially Friedrich A von Hayek, *Studies in Philosophy, Politics and Economics* (Routledge & K Paul 1967) chs 2, 4–7. Unlike Alchian, who expressly roots his theory in the Darwinian precedent, Hayek's relation to Darwin is more fraught. He expressly disclaimed any intellectual debt to Darwin, attributing his evolutionary doctrines to Austrian economist Carl Menger and to key figures in the eighteenth-century Scottish Enlightenment, especially Mandeville, Hume, and Smith, who he claimed had developed ideas of social evolution long before Darwin. Indeed, Hayek suggested that Darwin's theories were no more than the application of Smith's ideas to the biological realm. Hayek's intense scepticism about the powers of reason (anti-rationalism) and his attribution of social institutions to spontaneous emergence rather than deliberate design certainly echo, and in many cases directly borrow from, these thinkers. Yet, as convincingly documented by Angner, Hayek's account of the mechanisms driving the appearance and persistence of social institutions is borrowed largely from Oxford-school zoology and thus owed a great deal to Darwin. Erik Angner, 'The History of Hayek's Theory of Cultural Evolution' (2002) 33 *Studies in History and Philosophy of Biological and Biomedical Sciences* 695; Naomi Beck, 'The Spontaneous Market Order and Evolution' (2016) 58 *Studies in History and Philosophy of Biological and Biomedical Sciences* 49.

¹¹³ Most of the research that led to construction of the modern synthesis, from the turn of the twentieth century into the 1950s, was concerned with providing credible evolutionary explanations of physical features of organisms, not their behaviour. See Bowler, *Evolution* (n 20) 325–40.

¹¹⁴ WD Hamilton, 'The Genetical Evolution of Social Behaviour. I' (1964) 7 *Journal of Theoretical Biology* 1; WD Hamilton, 'The Genetical Evolution of Social Behaviour. II' (1964) 7 *Journal of Theoretical Biology* 17.

¹¹⁵ The arguments of these papers, originally published starting in 1973, were brought together and synthesized in John Maynard Smith, *Evolution and the Theory of Games* (Cambridge University Press 1982).

¹¹⁶ Edward O Wilson, *Sociobiology: The New Synthesis* (Belknap Press of Harvard University Press 1975).

Human Nature, attempted to cast human behaviours and social structures as outcomes of evolutionary dynamics at the genetic level.¹¹⁷

Finally, starting in the mid-1960s, social scientists began to subject cultural phenomena to independent analysis using analytical tools drawn from neo-Darwinism.¹¹⁸ At least some of the late nineteenth- and early twentieth-century social evolutionists had identified variation, selection, and retention as the elements of an abstract 'formula' or 'recipe' for natural selection.¹¹⁹ Their accounts, however, generally modelled social evolution in terms of interactions between prevailing social practices and the biological inheritance of humanity or of particular social groups.¹²⁰ The touchstone for this new Darwinian social theory, a 1965 paper by Donald Campbell, suggested by contrast that 'variation and selective retention' might be used as general model, of which the evolution of biological species and the propagation of cultural forms were parallel instances.¹²¹ A separate, but similar, strand of scholarship developing Richard Dawkins's concept of a 'meme,' was rooted in an extended metaphor in which competition between genes became a map for competition between individual 'units' of cultural phenomena.¹²²

A. *Evolutionary as an Appeal to Science*

Starting around 1980, this congeries of influences led to acute shifts in the uses of evolution in legal scholarship. Certainly, some analyses used evolutionary biology as a direct source of analytical inspiration, much as the antecedents noted above had done. In

¹¹⁷ Edward O Wilson, *On Human Nature* (Harvard University Press 1978).

¹¹⁸ The reference to culture has generally been understood to comprise any sort of knowledge, technique, or practice that an individual can learn from others rather than inheriting from genes or learning independently. Peter J Richerson and Richard Boyd, 'Evolution: The Darwinian Theory of Social Change' in Waltraud Schelkle (ed), *Paradigms of Social Change: Modernization, Development, Transformation, Evolution* (Campus Verlag 2000) 257–58. More recent work has stressed that cultural evolution, understood as the selective reproduction of beliefs, attitudes, ideas, and information held by and transmitted between individual minds, needs to be analysed independently from the evolution of social phenomena, including institutions, infrastructure, and rule-governed practices like law, so that at least three levels of evolutionary analysis are required. See Garry Runciman 'Darwinian Explanations of Socio-Cultural Evolution' in Ian Gough and others, 'Darwinian Evolutionary Theory and the Social Sciences' (2008) 3 *Twenty-First Century Society* 65, 67–71.

¹¹⁹ See eg Keller (n 102) 773.

¹²⁰ Beyond Spencerian defences of laissez faire economic policy, such theories thus offered intellectual cover for scientific racism, eugenics, colonialism, and genocide. Campbell (n 101) 20, n 3; Bowler, *Evolution* (n 20) 297–307.

¹²¹ Campbell (n 101) 26–27. For discussions of Campbell's influence, including the suggestion that he was first to offer an account of 'variation and selective retention' operating exclusively at the socio-cultural level, see Gough and others (n 118); Richerson and Boyd (n 118).

¹²² Michael S Fried, 'The Evolution of Legal Concepts: The Memetic Perspective' (1998–99) 39 *Jurimetrics* 291; Deakin, 'Evolution for Our Time' (n 3). Dawkins introduced the meme concept in Dawkins (n 110) ch 11.

this category of theory, 'evolution' or 'evolutionary' is self-consciously used as an application of or borrowing from a broader body of 'evolutionary' knowledge.¹²³ However, these trends in psychological, economic, and social analysis also provided a precursor for more general uses of evolution, to express a discrete theoretical, that is to say jurisprudential ambition. Those who speak of the evolution of law today are often doing no more than invoking certain high-level features of Darwin's account of change, and evoking Darwin's account as a model to be emulated.

The most obvious way in which evolutionary biology appears as a model worth emulating finds expression in the implicit hope that accounts of legal evolution will deserve the prestige and credibility of being 'scientific.'¹²⁴ Modern evolutionary biology is scientific, and many seem to take for granted that one cannot call an account of legal change evolutionary unless it is scientific as well.¹²⁵ The relation between the use of 'evolutionary' as a label and the scientific ambitions of the theories it labels works in two directions. In sociology of knowledge terms, invoking the prestige of evolutionary theory may be motivated by a desire to reproduce some of Darwin's impact and influence.¹²⁶ Simply calling an account of legal change evolutionary may work to lend it a veneer of credibility. On the other hand, it is not as if the word is cynically deployed to provide cachet to just any account of legal change, no matter the project informing it. Rather, the invocation of scientific credibility entailed by the use of the word is underwritten by the pursuit of the same epistemic ends that undergirded the (eventual) success of Darwin's theory. For example, an account of legal evolution will primarily be intended as a form of explanation rather than a project of evaluation or prescription,¹²⁷ though that is different from the corresponding accounts having no normative relevance.¹²⁸

Beyond the goal of explanation, however, an abstract aim of scientific validity yields little guidance about how one should go about their research, nor any clear standards for the

¹²³ See below, Part IV

¹²⁴ MBW Sinclair, 'Evolution in Law: Second Thoughts' (1993) 71 U Det Mercy L Rev 31, 32-33.

¹²⁵ Clark, for example, does not say why his scientific, methodical, interdisciplinary, institutional approach to studying legal change might be called evolutionary. He simply takes it for granted that this is the appropriate label. Clark (n 3).

¹²⁶ Hovenkamp, 'Evolutionary Models in Jurisprudence' (n 3) 647; Sinclair (n 124) 32-33.

¹²⁷ Jan M Smits, 'Darwin at Work: How to Explain Legal Change in Transnational and European Private Law' in Peer Zumbansen and Galf-Peter Calliess (eds), *Law, Economics and Evolutionary Theory* (Edward Elgar 2011) 332.

¹²⁸ Opinions are divided on the normative implications of applications of evolution in law. The issue is complicated, and I will return to it in the conclusion.

accounts that such conduct should produce. Even with the hard sciences treated as a gold standard to emulate, the ‘scientific’ label still lacks precise enough meaning to distinguish valid from invalid accounts. One effect of using evolution in ways that resonate with neo-Darwinian thinking is to give the scientific ambition some specific content.

B. Minimal Criteria for Legal Evolution

Below, I set out seven criteria that distinguish legal evolution from other sorts of accounts of legal change. Evolution seems to be deployed in the context of efforts to develop *naturalistic, empirically robust, general, nomothetic* explanations that understand change as *mechanistic, iterative, and emergent*. This list is intended to be neither exhaustive nor universal. Indeed, many of the features I identify overlap and are interrelated with one another. There may be other, possibly more parsimonious ways to organize the same features. Nevertheless, taken together they set out a methodological apparatus that shares a certain family resemblance. Finally, my use of inevitably contested terms to label these criteria is wholly stipulative, and is intended only to provide a convenient shorthand. I do not intend to weigh in on the real or correct meaning of the terms I use.

Before turning to an elaboration of these features, let me note that I have deliberately described these eight features as ‘criteria.’¹²⁹ As criteria, they are intended as descriptive adjectives that can distinguish accounts that could be fairly described as ‘evolutionary’ from those that cannot, but also as appraisive adjectives that can distinguish the relative quality and success of accounts that aspire or claim to be ‘evolutionary.’¹³⁰

1. Naturalistic

Evolutionary accounts in the contemporary register are distinguished above all by their commitment to naturalism. What marked Darwin’s theory as ‘scientific’ was not only that he provided a plausible explanation for otherwise puzzling phenomena,¹³¹ but that his explanation eschewed any reliance on metaphysical substance. His account posited no ‘first cause’ driving the process, no Power determining its progression, and no telos to which things inherently tend.¹³² The eventual validation of Darwin’s theory had to await the identification of the mechanisms that introduce variations among individual

¹²⁹ cf John Gerring, *Social Science Methodology: A Criterial Framework* (Cambridge University Press 2001).

¹³⁰ An appraisive concept ‘signifies or accredits some kind of valued achievement.’ WB Gallie, ‘Essentially Contested Concepts’ (1955) 56 *Proceedings of the Aristotelian Society* 167, 171–72.

¹³¹ Hovenkamp, ‘Evolutionary Models in Jurisprudence’ (n 3) 651.

¹³² Freeman and others (n 28) 215.

members of a species, and that allow those variations to be inherited across generations.¹³³ Nonetheless, his account was presented entirely in terms of observables: the continual introduction of diversity among members of a species, inheritance of distinguishing features, and differential rates of survival under environmental constraint. References to evolution tend to import this implicit naturalism into accounts of legal change, as well.¹³⁴ Accounts of legal change that are cast as evolutionary take account for the objects of change—generally legal norms, legal institutions, or legal discourse—as well as the factors engendering legal change entirely in terms of (social) facts. Evolution’s naturalism favours the temporal. Evolutionary explanations are accounts of relations between phenomena that are in the world and of the world. They eschew any kind of dependence on transcendentals or the divine.

This commitment, however, also disqualifies historicist accounts of legal change, as described in Part II, from being evolutionary in the modern scientific sense. Savigny, with his reliance on ‘silently-operating powers’ is certainly not included.¹³⁵ If the only evidence for the explicans is the explicandum, then the naturalist perspective does not admit the account as an explanation at all, but only as a rationalization. In much the same way, Mansfield’s vision of the common law working itself pure does not fit either. The gradual uncovering or revealing of a reality that is hidden fails the test of naturalism not only because it posits as causal some factor whose observation is always delayed to some future moment, but because it seems to deny the reality that law changes at all. I should specify as well that there is no room for natural law in naturalistic accounts of legal change, save insofar as what jurists say about natural law may form part of the legal discourse and thereby contribute to changes in effective norms.

This connects well to a different point, which is that the restriction of evolutionary accounts to those expressed in terms of observables does not mean limiting them entirely to external factors, although this was an approach championed by earlier enthusiasts of legal evolution.¹³⁶ Court decisions, constitutional texts, and adopted legislation; deeds,

¹³³ Bowler, *Evolution* (n 20) 251–74, 325–39.

¹³⁴ ‘... explanation of evolution did not require the active participation of God or the Zeitgeist or Natural Law.’ Hovenkamp, ‘Evolutionary Models in Jurisprudence’ (n 3) 647.

¹³⁵ Elliott (n 3) 42–43.

¹³⁶ Wigmore’s very early account of legal change in entirely anti-metaphysical terms is strongly focused on external factors. John H Wigmore, ‘Planetary Theory of the Law’s Evolution’ in Albert Kocourek and John H Wigmore, *Evolution of Law: Select Readings on the Origin and Development of Legal Institutions* (Little Brown 1918) vol 3. On Wigmore’s approach see Elliott (n 3) 46–50.

certificates, and contracts; legal commentary and scholarship, and even the advice that lawyers give to their clients—these are all observables, as well. Each forms part of the law that is changing, but may also works to enable, spur, and condition legal change.

2. Empirically Robust

The aim of an evolutionary account should not just be to rely solely on observable factors, but to accord with what has actually been observed. Such an account should, for example, not only be expressed in terms of judicial decisions and political interests, but fit in some way with a record of actual decisions, behaviours and actions. Evolutionary accounts, that is, are distinguished by empirical rigor.¹³⁷ They must, it is said, 'be grounded in actual historical data, observed as dispassionately as possible.'¹³⁸

If the nature of the empiricism involved is clear, the 'robustness' can be understood in two possible ways. On the one hand, it might be thought that evolutionary accounts should be evaluated against empirical data. On the other hand, the aim of robustness could also be described as a matter of seeking coherence or triangulation between the theory and the data alone. All theories of law and legal change necessarily pursue some form of coherence, but the appeal to the empirical works primarily by excluding the ideal and the speculative. Thus, judicial decisions are to be taken *as law*, not as evidence of a coherent whole called law that exists behind or before or above those decisions.

What is excluded, then, are explanations of law that focus on the normative or logical coherence of rules, judgements, principles, and the like. Whatever value may lie in accounts that seek to identify the immanent logic of a legal concept or doctrine, they would not count as explanations that meet this standard if in so doing they conflict with actual judicial, legislative, or administrative behaviour.¹³⁹

Some have stressed that evolutionary accounts of law, as avowedly scientific accounts, should be falsifiable.¹⁴⁰ The influence of Popper's famous criterion for knowledge to count as scientific, namely that it be capable of falsification, should not be overstated.¹⁴¹

¹³⁷ Elliott (n 3) 50.

¹³⁸ Alan Watson, *The Evolution of Law* (Johns Hopkins University Press 1985) ix.

¹³⁹ Sinclair (n 124) 41–42.

¹⁴⁰ Clark (n 3) 1258–59.

¹⁴¹ Karl Popper, *The Logic of Scientific Discovery* (Routledge 2005).

The characterization of good science in terms of verifiability is just as common.¹⁴² It is thus debatable that this should be taken as an additional criterion or count as a sub-factor or variation on the criteria of naturalism and robustness.

3. General

The search for explanations of legal change, expressed in terms of observables and measured against empirical data, has often been conducted within the bounds of single episodes or single legal contexts.¹⁴³ Some scholars have noticed what seems like an evolutionary process in one context, and limited their ambition to testing that intuition. Often, however, even studies that are silent on the nature of legal change per se embody a tacit attitude that whatever episode is to be explained is only a particular example of a more general type of process. This is to be expected. The power of the Darwinian synthesis lies not just in its capacity to explain the genealogy of any particular species, but in its explanation for the peculiarities of the entire diversity of life. In explanatory terms, Darwin works as a kind of universal solvent. It is thus reasonable to expect that legal scholars might be tempted to also take evolution as a model for all legal change, not just a single episode.¹⁴⁴

The broader goal, therefore, beyond generating individual accounts that meet these standards, has been to fit those cases into a broader ‘theory’ of legal evolution.¹⁴⁵ Often, such ‘generalizations ... [are] more than mere descriptions or recountings of what has happened.’¹⁴⁶ For some at least, the goal is a ‘general view of the nature of legal change which is independent of time and place,’ something that squares with processes

¹⁴² See eg Hovenkamp’s justification for using Darwin as the benchmark of scientific validity for legal theorizing in large part because Darwin’s theory was ‘at least *theoretically* verifiable.’ Hovenkamp, ‘Evolutionary Models in Jurisprudence’ (n 3) 647–48.

¹⁴³ See eg Robert Charles Clark, ‘The Morphogenesis of Subchapter C: An Essay in Statutory Evolution and Reform’ (1977) 87 Yale LJ 90; David A Skeel Jr, ‘An Evolutionary Theory of Corporate Law and Corporate Bankruptcy’ (1998) 51 Vano L Rev 1325; Simon Deakin, ‘The Contract of Employment: A Study in Legal Evolution’ [2001] Historical Studies in Industrial Relations 1; Wolfgang Kerber, ‘Transnational Commercial Law, Multi-Level Legal Systems, and Evolutionary Economics’ in Peer Zumbansen and Graf-Peter Calliess (eds), *Law, Economics and Evolutionary Theory* (Edward Elgar 2011).

¹⁴⁴ The correct legal mapping of the premise that Darwinian explanations are applicable to ‘all cases’ in the domain of life is not self-evident, however. It is common, for example, to limit the evolutionary rubric to only one kind of law-making. See below, Chapter 2. If it is *reasonable* to think that evolution characterizes all kinds of law-making, it is also conceivable that processes that look like Darwinian evolution might actually be limited to one set of doctrines, periods, or legal systems.

¹⁴⁵ Sinclair (n 3) 452; Oliver R Goodenough, ‘When Stuff Happens Isn’t Enough: How an Evolutionary Theory of Doctrinal and Legal System Development Can Enrich Comparative Legal Studies [Symposium on Evolutionary Approaches to (Comparative) Law: Integrating Theoretical Perspectives]’ (2011) 7 Rev L & Econ 805, 806.

¹⁴⁶ Clark (n 3) 1259–60.

undergone in ‘mature systems, underdeveloped systems, and in legal systems ... that come into powerful contact.’¹⁴⁷

Even where authors are after less elusive quarry, they still tend to limit the *evolutionary* hallmark by dint of how well an account explains both the present diversity of legal systems and the myriad transformations that each undergoes over time.

4. Nomothetic

These first three criteria—naturalism, empirical robustness, and generality—might be satisfied by an exhaustive list of the factors that have mattered in shaping law and its development through time.¹⁴⁸ An evolutionary account of legal change is expected to have an internal structure that beyond identifying relevant causal factors also addresses how they interact to produce change. Indeed, most uses of ‘explanation’ in the social science would demand this degree of structure. Elliott suggests that evolutionary models are a useful starting point for identifying high-level patterns of legal change: ‘writers in the evolutionary legal tradition...aspire to describe global patterns of change in the law.’¹⁴⁹

The goal of these arguments is to identify law-like rules—to prevent confusion, we may refer to them as nomothetic claims—about processes of legal change.

5. Mechanistic

Some may gather these four criteria together under the rubric of social scientific ‘positivism,’¹⁵⁰ an epistemological stance which casts a wide net in the social sciences.¹⁵¹ It is thus primarily in the next three criteria that the evolutionary vision is distinguishable from other modes of jurisprudence.

The first of these three criteria is a concern with ‘mechanisms.’ An evolutionary perspective addresses the detailed inner working of change processes.¹⁵² Here, a

¹⁴⁷ Watson (n 138) ix.

¹⁴⁸ Wigmore’s contribution to his massive edited volume with Kocourek amounted to little more than a list of factors that might be relevant to the path and locus of legal change. Wigmore (n 136).

¹⁴⁹ Elliott (n 3) 90–91.

¹⁵⁰ Hovenkamp provides a useful overview of the distinction between legal and social-scientific positivisms. Herbert Hovenkamp, ‘Positivism in Law & Economics’ (1990) 78 Calif L Rev 815, 816–22.

¹⁵¹ George Steinmetz (ed), *The Politics of Method in the Human Sciences: Positivism and Its Epistemological Others* (Duke University Press 2005).

¹⁵² Martin J Bailey and Paul H Rubin, ‘A Positive Theory of Legal Change’ (1994) 14 Int’l Rev L & Econ 467, 467–68; Elliott (n 3) 43, 46, 62. Calliess, Freiling and Renner place the search for mechanisms at the core of evolutionary theory. Graf-Peter Calliess and others, ‘Transnational Governance and Evolutionary

comparison with Newtonian physics and modern medical research will be instructive. Newton's theory of gravity posited the existence of a mathematical relationship that governs the forces which masses exercise on each other, a claim with impressive predictive power. His account was nomothetic, whence the very apt name 'law of gravity.' Yet neither the law nor Newton have anything to say about why masses attract one another. He did not know, and we are still trying to make sense of the 'mechanism' at play behind his theory. In modern medicine, we are often more concerned with whether a drug works than with how. The epidemiological paradigm that dominates the field is dedicated precisely to capturing effects that can be identified.¹⁵³ A smaller portion of the field, though, is concerned with studying why drugs or treatments have the effects they do on the body: the mechanisms by which those drugs work. Of course, an account of mechanisms can help to generate hypotheses and enrich our understanding of the relationship between cause and effect in the body's functioning. Nonetheless, the point is that the projects are distinct.

I have carefully used the term 'mechanistic,' indicating a relation to mechanisms, rather than 'mechanical.' The latter term has connotations of determinism, universality, and mathematical order that are specifically and explicitly excluded from what many people mean by evolution. Indeed, many understand evolutionary processes by definition as contrasts to mechanical processes in this latter sense.¹⁵⁴ Hayek's rejection of what he called 'nomothetic' explanations of social outcomes was anti-mechanical in this sense. He was sceptical above all about our capacity to set out clear mathematical relations between variables.¹⁵⁵ In searching for mechanisms of change, most modern references to evolution have the same exclusion in mind. They are looking for something like an account of how gravity works, not for a mathematical formula that describes how bodies under its power will develop through time.

Theory' in Peer Zumbansen and Galf-Peter Calliess (eds), *Law, Economics and Evolutionary Theory* (Edward Elgar 2011) 355–56.

¹⁵³ On the nature of the medical research paradigm, and its prominence in policy research more generally, see Martyn Hammersley, *The Myth of Research-Based Policy & Practice* (SAGE Publications Ltd 2013).

¹⁵⁴ Elliott counterposes evolution with 'iron laws of the machine' and calls Wigmore's planetary analogy (above n 136) 'too mechanical.' Elliott (n 3) 45, 49.

¹⁵⁵ Hayek (n 112) 41.

6. Iterative

Perhaps primarily due to evolution's earlier connotations of some prefigured design being realized, the concept has long been contrasted with 'revolution.' Where the latter is violent, radical, sudden, and upsets the existing order of things, the former is organic, gradual, and orderly.¹⁵⁶ Today, it is easy to find examples of legal analysis that, while only minimally cognizant of the distinction between the two concepts, nonetheless supports evolutionary change over 'revolutionary' legal change characterized by rupture or crisis.¹⁵⁷

As Williams has stressed, however, the distinction between 'evolution' and 'revolution' fits poorly with modern understandings of change in the domain of life. Species go extinct, sometimes through competition with others, but also as a result of larger climactic changes that drive mass extinction.¹⁵⁸ The end of the dinosaurs and the rise of mammals was a revolution in the animal kingdom but still a process wholly mediated by evolution. Moreover, there is more controversy than there once was in biological circles about how slow evolution actually is. Debates between strict Darwinians like Richard Dawkins, and advocates of punctuated equilibrium, most notably Stephen Jay Gould, have upset past associations of evolution with smooth, gradual processes.¹⁵⁹

Despite this ongoing debate, some legal scholars continue to interpret evolution as defined by slowness, continuity, and gradation, rather than speed, intermittence, or abruptness.¹⁶⁰ If evolution need not be gradual in the sense of being slow or smooth, there is one way in which the biological reference point accords with a bias in favour of small or slow changes over large or fast ones. One of Darwin's central principles, after all, is 'Nature does not make jumps.'¹⁶¹ The possibility of 'revolution' in the transformation of ecologies may suggest that great, fast leaps are possible: we travelled the great distance from a world with the dodo bird to one without it in a very short time. Nonetheless, evolution accords with our sense that it would take a very long time and many

¹⁵⁶ Williams (n 11) 80–81.

¹⁵⁷ Ellen E Sward, 'Values, Ideology, and the Evolution of the Adversary System' (1988–89) 64 Ind LJ 301, 311, n 41.

¹⁵⁸ Williams (n 11) 80.

¹⁵⁹ For continuing controversies within evolutionary biology, see Bowler, *Evolution* (n 20) ch 10.

¹⁶⁰ William M Landes and Richard A Posner, 'Adjudication as a Private Good' (1979) 8 J Legal Stud 235, 224, n 20.

¹⁶¹ The principle of *natura non facit saltus*, had a long pedigree in biology which was supported by Darwin and bolstered in his research. Dennett (n 72) 288.

intermediate steps to travel that distance in the opposite direction.¹⁶² Accordingly, beyond expressions in terms of speed or rhythm, evolutionary processes are taken to be iterative, incremental, or cumulative.¹⁶³ This association manifests in a number of ways. There is, first of all, a generalized perception of path dependence, that history matters. What is possible tomorrow is conditioned by current states of affairs as well as by the whole series of events that preceded today's forms. Grass cannot sprout hair, even if doing so would increase its environmental fitness.¹⁶⁴ Likewise, some feel that speaking of legal evolution makes sense only inasmuch as current forms work as attractors and new forms do not depart from them too drastically.¹⁶⁵ There is, finally, a related sense that what is brought into being all at once or from a single source cannot be characterized as evolutionary, a sentiment that draws us into our next criterion.

7. Emergent

Though it is widely debated by theorists, one of the central operative premises of practicing lawyers is that law is created by actors who have been granted law-making powers by an ultimate law-making authority. The central doctrine of statutory interpretation, across its variants, is to read legal texts first and foremost so as to accord with the intentions of the legislator. Similar premises are influential, though more controversial, in constitutional interpretation.¹⁶⁶ Interpretive reliance on the intention of the legislator, however, logically presupposes that the content of the law is informed by some plan, design or pattern, behind which can be discerned a legislator imaginable as some kind of unified, or at least joint, author who had that design 'in mind' when the law came into being. The conceit is not just that a rule or regime has a logic of action, but that this logic reflects a prior, coherent reasoning process about how to achieve ends through means.

One of the hallmarks of evolutionary thinking about legal change is its rejection of, or even hostility toward, this line of reasoning about law's genesis. As far back as 1919 the evolutionary ambition was derided for its incompatibility with a cornerstone of legal

¹⁶² The idea of distance accords with Dennett's idiom of evolution as a vehicle through 'design space.' Dennett (n 72).

¹⁶³ Deakin, 'Evolution for Our Time' (n 3) 4.

¹⁶⁴ Scott Dodson, 'A Darwinist View of the Living Constitution' (2008) 61 *Vano L Rev* 1319, 1330.

¹⁶⁵ Sinclair (n 3). But see the discussion in Chapter 3.

¹⁶⁶ See my Introduction.

positivism, namely that law is authored by human agents.¹⁶⁷ As Gager put it, 'law as law has no "tendency" whatever, any more than a quantity of bricks has a tendency to become a house. Strictly it never changes, but it is changed from without; it does not develop, but it is developed.'¹⁶⁸

Gager's position entails a subtle but crucial fallacy. It may be that the actions of the legislature provide the index of law's *validity*, but that does not necessarily make the content or structure of law the product of any legislator's intention. It is possible for human actions to produce phenomena that do not implement any one agent's plan; they may give rise to patterns that are not deliberately designed, or even consciously put in place.

The twentieth century's eminent theorist of this 'middle realm' between the natural and the artificial was Friedrich Hayek.¹⁶⁹ A central theme of Hayek's work was that many social phenomena, though they may seem the products of deliberate action or a preexisting plan, are in fact emergent, or in Hayek's preferred terminology, 'spontaneous.' Hayek is associated with his dictum that there is much in social life that is 'the result of human action, but not of human design.'¹⁷⁰ Social facts could, as per the original sense of 'fact,' be artefacts made through the actions of persons without having to be the products of artifice. Hayek was hardly the original author of this idea. He explicitly recognized his intellectual debts to the Scottish Enlightenment.¹⁷¹ Nevertheless, he has since become its most noted champion.

There is some controversy about whether the effort to explain the existence and origin of apparently complex, highly patterned, relatively functional entities as something other than the product of a reasoning mind or an active will was first applied to social life or to the natural world. Certainly, Darwin's explanation for the complexity and relative functionality of organisms as the outcome of anonymous, unguided processes was

¹⁶⁷ Edwin Gager, 'Review of *Formative Influences of Legal Development*, Evolution of Law Series, Vol 3. Compiled by Albert Kocourek and John H Wigmore. Boston, Little, Brown & Co. 1918.' (1919) 28 Yale LJ 617.

¹⁶⁸ *ibid* 617-18.

¹⁶⁹ See especially 'The Results of Human Action but not of Human Design,' Hayek (n 112) ch 6. On Hayek's work as an effort to carve out a 'middle realm' between the natural and the artificial, see Edna Ullmann-Margalit, 'Invisible-Hand Explanations' (1978) 39 *Synthese* 263, 263.

¹⁷⁰ See especially 'The Results of Human Action but not of Human Design,' Hayek (n 112) ch 6.

¹⁷¹ In particular, Hayek borrowed 'human action but not human design' from one of Adam Smith's Scottish contemporary, Adam Ferguson. *ibid* 96, n 1.

preceded in strict temporal terms by the application of this idea to social phenomena by eighteenth-century Scottish philosophy. Hayek took emergent complexity to be the more general concept, and understood Darwin's theory to be no more than a borrowing of that concept from the Scots. While Hayek may have been wrong about Darwin's actual inspirations, Darwin admittedly may not have invented the idea of emergent complexity in the natural world.¹⁷²

The question of origins and precedence takes me into questions of the history of science that are best left to other scholars. What I do want to draw out and connect to modern invocations of evolution, however, is the affinity between the concept of evolution, and this broader concept of emergent complexity. At least in popular understandings, the strongest association that is typically made with the Darwinian doctrine of evolution is its contrast with the principle of design. Evolutionary doctrine understands that no matter how well-suited an organism or species is to its environment, its form is nonetheless the outcome of a series of episodes where random variation supported the survival of one strain over another, rather than the product of a purposive intelligence. The emphasis here is not just on a specific feature being the aggregate of a series of small changes, but on observable changes being the result of structured interactions between a variety of factors—never the intervention of a single actor.

While being careful not to ascribe their position to Hayek's influence, we can say that jurists who speak of legal evolution have in mind some form of 'invisible-hand explanation,' a concept coined after Hayek by the political philosopher Robert Nozick.¹⁷³ (Though its origins in Adam Smith's notorious image for the market provide some insight into its intended meaning, the term is maladroit on its face, given its evocation of a hidden agent behind seemingly contingent outcomes.¹⁷⁴ But given its currency, it will have to do.)

We might differentiate between strong- and weak-type of invisible-hand arguments, and equivalently between strong- and weak-type invisible-hand processes, a distinction which maps onto palpable differences of opinion about how the concept might apply to the origins and transformation of law. In the strong type, the phenomena of interest

¹⁷² Beck (n 112) 50.

¹⁷³ Robert Nozick, *Anarchy, State, and Utopia* (Basic Books 1974) 18–22; see also Ullmann-Margalit (n 169). Though Nozick can take credit for the term, he is clear that his thinking about the concept is largely due to Hayek: Nozick 20, n 13.

¹⁷⁴ The deficiencies of the term are emphasized by its similarity to 'hidden hand' explanations, which Nozick used to indicate its inverse. Nozick (n 173) 19.

would not only have to be a bottom up aggregation of component actions, but of component actions that are simple, narrow, or *naïve*. The component actions must not, in other words, be informed by a motivation or intention concerning higher-level, emergent structures or patterns. Darwin's theory of natural selection therefore counts as a strong-type argument since organism behaviour is driven by immediate reproduction, or by even simpler drives, rather than by any specific intention related to the evolutionary process itself or its transformative outputs. As applied to social phenomena, the archetype of this strong-type argument can be found in models of the emergence of prices in a competitive market: by construction, individual actors in such a market are uniquely motivated by the maximization of utility or profits, not by any intention to shape prices. Prices nonetheless arise through the interaction of that maximizing behaviour with an exogenous supply of basic resources and production technologies. Prices are not the result of anyone's desire for relative prices to have a certain structure, or even of any intention for prices to exist at all.

The weak type of invisible-hand explanations are only possible in processes that involve strategic or intentional actors. Whereas with strong-type explanations, the component motivations or actions are uninformed by the aggregate or emergent outcome, the component actions of weak-type invisible-hand processes may include some awareness of, or reference to, an aggregate result or higher-level outcome. Weak-type explanations provide a possible corrective to Gager's position.¹⁷⁵ In modern legislative processes, legal regimes are often built in response to actors who advance extensive, sometimes complex visions for its content. Yet, there are a number of ways in which the results can still be understood to arise from an invisible hand-like process. For one, law seldom reflects the vision of a single actor. Rather, a legislative scheme or reform will often reflect a process of compromise and accommodation involving many players. Beyond offering a quid pro quo where costs and benefits reflect the balance of power and prevailing standards of fairness, the result will often merge and mingle visions of what the law should be in ways that are not always rational or coherent. Second, a legislative text once promulgated serves only as the seed of that law as it will be administered and enforced in practice by the courts and other legal actors. So even if the law on the books was the product of a clear, coherent, and comprehensive design by legislators, the law in action might not

¹⁷⁵ Above, text to nn 167–168.

correspond to the intentions, motivations, or plans of any single actor. Third, law is never drafted anew from whole cloth. In the legislative process, drafters must balance a reliance on preexisting norms and categories with semantic novelty. A legislative text that is rife with new concepts will ultimately hand the courts a great deal of discretion over the scope and operation of the law, while one that leans too heavily on preexisting legal concepts risks being distorted and bound up with the jurisprudence in which those concepts are entangled. In any event, most law ends up being a hybrid (if not a Frankenstein's monster!) with neither its largest parts nor its smallest details corresponding to what anyone in particular wanted it to be, nor a fortiori how anyone would have otherwise designed or planned it.¹⁷⁶

IV. What Significance for Evolutionary Theory in Legal Evolution?

The end of Part III offered a list of criteria *necessary* for any account of legal change to count as evolutionary, in the contemporary sense. Especially for those scholars who make only vague reference to evolution in their work, these criteria would likely seem to be a sufficient, if pedantic, account of what they have in mind when they label their accounts of law as 'evolutionary.'¹⁷⁷ When I stated in the introduction that my definition would be wholly stipulative, I could have simply stopped there.

In line with the neo-Darwinian inspiration behind the criteria explored above, a rich vein of scholarship has been motivated by a belief that accounts of legal change must draw from the broader field of evolutionary theory either to count as evolutionary, or to be successful in their evolutionary ambitions.¹⁷⁸ It will be useful in the following chapters to give a clearer sense both of the body of knowledge from which these scholars are drawing, and the way in which they seek to apply those insights.

¹⁷⁶ These ideas are fleshed out in Chapter 4.

¹⁷⁷ Watson's account of legal evolution essentially begins and ends with these criteria and mentions neither Darwin nor natural selection. Watson (n 138).

¹⁷⁸ Deakin, 'Evolution for Our Time' (n 3); Niklas Luhmann, *Law as a Social System* (Fatima Kastner and others eds, Klaus A Ziegert tr, Oxford University Press 2004) 230–31; Gunther Teubner, *Law as an Autopoietic System* (Zenon Bankowski ed, Anne Bankowska and Ruth Adler trs, Blackwell 1993) 51; Sinclair (n 124) 31, 33; Jody S Kraus, 'Legal Design and the Evolution of Commercial Norms' (1997) 26 J Legal Stud 377, 382; Smits (n 127) 792; Goodenough (n 145) 809ff; Bart Du Laing, 'Evolutionary Analysis in Law and the Theory and Practice of Legislation' (2007) 1 *Legisprudence* 327. See also E Donald Elliott and others, 'Toward a Theory of Statutory Evolution: The Federalization of Environmental Law' (1985) 1 *JL Econ & Org* 313, 314; Rodgers (n 8) 56ff.

A. Analogy or Application?

It is common to describe the resulting accounts which draw from evolutionary theory as the product of a *metaphor* or *analogy* with biological evolution.¹⁷⁹ Doing so risks mischaracterizing what these scholars are doing with evolutionary theory when they work to craft 'evolutionary accounts of law.' First, it could give the mistaken impression that these scholars are engaged in something like a one-to-one mapping between law and the elements of the modern synthesis.¹⁸⁰ Creating a fruitful account of legal evolution need not depend on finding a direct correspondence in the legal realm for genes, organisms and species, species' interactions with their environments and with each other, genetic mutation and reproductive success, etc. As I elaborate below, most scholars understand that the evolutionary principle needs to be applied at a higher level of abstraction.

Second, the language of metaphor is an awkward fit for some accounts that have brought legal thought into contact with evolutionary theory. Notably, the majority of such literature has sought to illuminate legal questions by drawing on claims about human behavioural and psychological traits, rooted in accounts of humanity's shared genetic—and thus 'evolutionary'—heritage. Whatever light these accounts may shed on law's current form,¹⁸¹ they have little to nothing to say about legal *change* itself.¹⁸² Such approaches nonetheless provide a point of comparison. The calling approaches that explain law as an expression of human evolutionary biology 'direct,' others are encouraged to describe more sociological approaches as 'metaphorical.' The distinction between the two modes of application, however, is not as sharp as the direct/metaphorical dichotomy would imply. A non-negligible portion of scholarship on legal evolution fails to clearly draw a line between the modes and registers of application.

¹⁷⁹ Zamboni expressly distinguishes a tradition of 'evolutionary theory and law' on this basis. Mauro Zamboni, 'From "Evolutionary Theory and Law" to a "Legal Evolutionary Theory"' (2008) 9 German LJ 515, 521–22; Mauro Zamboni, 'Making Evolutionary Theory Useful for Legal Actors' in Peer Zumbansen and Galf-Peter Calliess (eds), *Law, Economics and Evolutionary Theory* (Edward Elgar 2011) 272–73. For additional examples of this characterization of the approach, see Elliott (n 3) 39; Deakin, 'Evolution for Our Time' (n 3) 1–2, 4; Teubner (n 178) 51; Sinclair (n 124) 31; Dodson (n 164). See also JB Ruhl, 'The Fitness of Law: Using Complexity Theory to Describe the Evolution of Law and Society and Its Practical Meaning for Democracy' (1996) 49 Vano L Rev 1406, 1412–13.

¹⁸⁰ For 'modern synthesis' see above, n 25.

¹⁸¹ There are good reasons to remain sceptical of the evidence in this body of work. Brian Leiter and Michael Weisberg, 'Why Evolutionary Biology Is (So Far) Irrelevant to Legal Regulation' (2010) 29 Law and Philosophy 31.

¹⁸² Simon Deakin, 'Legal Evolution: Integrating Economic and Systemic Approaches' (2011) 7 Rev L & Econ 659, 670–73; Deakin, 'Evolution for Our Time' (n 3) 1–3.

For example, is an account that frames law's development as a result of spontaneous cultural innovation and the differential survival rates of human groups a direct application of evolutionary theory or a metaphorical one?¹⁸³

The systems theorist Niklas Luhmann has offered an alternative framing for the relationship between legal theorizing and evolutionary theory. References to evolutionary theory, he argues, 'should not be taken as an argument by analogy but as a pointer to a general evolutionary theory, which can have many different applications.'¹⁸⁴ Luhmann argues that the relationship between accounts in evolutionary biology and accounts of legal evolution should be understood as a matter of a single abstract schema or algorithm being applied to two different domains, or simply to different combinations of elements.¹⁸⁵

At first glance this seems to be a distinction without a difference. What difference is there between drawing by analogy from evolutionary biology, or drawing on an abstract theory that was constructed on the basis of evolutionary biology? Metaphor always involves a combination of abstraction and translation. An analogy between two settings does not preclude the existence of elements shared across the two domains. It is possible to draw analogies between chess and checkers, even though they are different games played on the same board. Nonetheless, the distinction does make a difference, inasmuch as the language of analogy risks concealing the selective borrowing, and implication in more fundamental theoretical controversies that legal scholars are engaged in. Let me elaborate.

B. Natural Selection, the Darwinian Algorithm, and Selective, Controversial Borrowing

One way in which the register of 'application' may make more sense than 'analogy' is that legal scholars who invoke evolutionary theory draw *electively* from that body of knowledge, rather than trying to draw a parallel between every element of the two domains. This is perfectly illustrated by Luhmann's posture, which reduces the concept

¹⁸³ Such group selection was the basic structure of Hayek's account of the evolutionary origins of the market order, which he more or less equated with the rule of law. For an overview, see Angner (n 112) 697–99. Smits draws on Keller: Jan M Smits, 'Is Law a Parasite? An Evolutionary Explanation of Differences among Legal Traditions' (2011) 7 Rev L & Econ 791, 798–99.

¹⁸⁴ Luhmann (n 178) 231. Luhmann's theories and his approach to legal evolution are explored in greater detail in Chapter 4.

¹⁸⁵ *ibid* 230–31. Luhmann does not speak of Darwin's theory in terms of an algorithm. The usage is instead due to Deakin, 'Evolution for Our Time' (n 3) 2, 4, 5–8.

of evolution to Darwin's theory, and Darwin's theory to a single schema. Whether scholars describe what they are doing as an 'analogy' to or an 'application' of evolutionary theory, almost all of them, Luhmann included, follow Campbell in identifying natural selection with the Darwinian algorithm, and in treating that conception of natural selection as a proxy for the whole of evolutionary theory.¹⁸⁶ Despite variant terminology, the common idea is that what makes an account 'evolutionary' is its articulation in terms of the combined operation of mechanisms of variation, selection, and descent.¹⁸⁷ The resulting challenge, and chief source of disagreement, accordingly lies in properly identifying the nature of descent, the sources of variation, and the mechanisms of selection.¹⁸⁸

Let me stipulate that there is nothing intrinsically wrong-headed with such partial, granular borrowing, provided we remain clear about what advocates of an evolutionary jurisprudence are actually doing. Yet it is important to keep in mind that it is an incomplete and biased mapping, not only in reducing natural selection to a three-element schema, but in focusing on natural selection alone.¹⁸⁹ Natural selection captures only a portion of the processes involved in the evolution of species. The 'Darwinian algorithm' is somewhat of a misnomer, since Darwin himself identified sexual selection as a distinct channel shaping the evolution of species.¹⁹⁰ Since the birth of the modern synthesis, moreover, an expanding repertoire of factors has been recognized as having a role in shaping the evolution of species.¹⁹¹ Genetic drift can lead to an increase in the frequency of a given trait in a population, even though those traits have no interaction with the reproductive success of the individuals which possess it. 'Hitch-hiker' traits can persist despite having no impact on an organism's overall reproductive success.¹⁹² There may

¹⁸⁶ For Campbell and other contributors to the development of the Darwinian algorithm, see above text to nn 118–122.

¹⁸⁷ See eg Sinclair (n 3) 454. Various alternatives to 'descent' are used in the legal literature and beyond Sinclair (n 3) (transmission / retention); Teubner (n 178) (stabilization / retention); Deakin, 'Evolution for Our Time' (n 3) (inheritance); Goodenough (n 145) (descent).

¹⁸⁸ Goodenough (n 145).

¹⁸⁹ The limits of the schema are elaborated in Chapter 3.

¹⁹⁰ Charles Darwin, *The Descent of Man, and Selection in Relation to Sex [1871]* (Reprint of 1871 edition, Princeton University Press 1981).

¹⁹¹ Leiter and Weisberg (n 181) 50–51

¹⁹² On pleiotropy, hitch-hiker traits, and genetic drift see and above, nn 197–199 and associated text.

be, in some species at least, occasional horizontal transmission of genetic material that radically contradicts the image of 'modification with descent.'¹⁹³

In sum, the processes studied by evolutionary biology are more complicated and much weirder than the operation of adaptation via natural selection alone. Of course, evolutionary theory cannot be reduced to theory about evolutionary biology. At least some works in legal evolution, for example, are framed as contributions to a more general body of evolutionary knowledge that can shed light on evolution in other domains, even biology.¹⁹⁴ Nonetheless, the diversity of dynamics that do mark biotic evolution shows that most legal scholarship is only attending to a portion of a broad field of concepts, ideas and precedents. The application of the evolution metaphor, model, or schema is thus entangled with choices about what parts of evolutionary theory should be borrowed from.

The other misunderstanding that might be propagated by the characterization of theory development in evolutionary jurisprudence as a matter of 'analogy' with evolutionary theory is an overestimation of the objectivity and concreteness of the comparator. Controversies concerning how to apply evolutionary theory to processes of legal transformation are attributable not only to questions of how to interpret evolutionary concepts in the legal domain, but are tied as well to persistent, serious controversies within evolutionary theory itself.¹⁹⁵ Legal scholars are particularly fond of the ideas of Stephen Jay Gould, for instance, yet Gould is generally treated as a marginal or at best controversial figure by highly respected historians and philosophers of evolutionary thought.¹⁹⁶

C. A Note on Adaptation

There are some who would argue that no theory can be properly called an evolutionary theory unless it can be expressed in terms of entities *adapting* to their environment. It is certainly true that adaptation plays a key role in Darwinian evolutionary theory.

¹⁹³ Howard Ochman and others, 'Lateral Gene Transfer and the Nature of Bacterial Innovation' (2000) 405 Nature 299.

¹⁹⁴ See for example Deakin's remark that exploration of legal evolution can contribute to 'a search for mechanisms which unite biological and cultural evolution,' and that 'identifying these general evolutionary mechanisms is part of a wide-ranging, interdisciplinary research agenda.' Deakin, 'Evolution for Our Time' (n 3).

¹⁹⁵ Above, text to n 159. See also Ruhl (n 179) 1412–15.

¹⁹⁶ Bowler, *Evolution* (n 20) 362–66; Dennett (n 72) ch 10.

Nonetheless, there are two reasons why adaptation cannot be included in a list of criteria aspiring to be minimalist and non-controversial. The first is that modern evolutionary theory has identified other factors which play a role in the transformation of species as they interact with their environments. Because of pleiotropy and polygeny, some evolved traits express a successful gene but do not themselves confer any advantage. Instead, like hitch-hikers, they tag along with some advantageous trait coded for by the same genes.¹⁹⁷ Through genetic drift, a trait can come to dominate a population, or it can disappear completely, entirely through chance rather than as the result of selective pressure.¹⁹⁸ Because of differences between the pace of evolution and the pace of species migration and environmental change, traits can be holdovers from past adaptations rather than offering any evident current advantage.¹⁹⁹

The broader point here is that the language of adaptation can engender serious confusion about the relations among current form, transformation process, and environmental constraints. ‘Survival of the fittest,’ together with the sense of adaptation it embodies, invokes a situation like water taking the shape of whatever cup it is poured into. Species by contrast do not ‘fit’ perfectly into their ecological niche. Environmental pressures are not so exacting. Rather, the responses of species to environmental change are shaped by niche, constrained by history, dependent on context, and inflected with serendipity. Spencer’s coinage, as a metonym for Darwin’s theory, thus did a sizeable disservice to public understandings of that theory and its implications.²⁰⁰ Adaptation, if limited to notions of making do, getting through, muddling along, or persevering under new circumstances, might not contradict the relation between process and product that scholars have in mind when they talk about law’s evolution. But the term, ‘survival of the fittest,’ is nonetheless an acute source of potential error.

¹⁹⁷ Pleiotropy occurs if one gene has consequences for multiple phenotypic traits. Polygeny names the dependence of traits on numerous genes. Dodson (n 164) 1340–42. Gould and Lewontin’s famed exploration of such hitch-hikers appeared in SJ Gould and RC Lewontin, ‘The Spandrels of San Marco and the Panglossian Paradigm: A Critique of the Adaptationist Programme’ (1979) 205 *Proceedings of the Royal Society B: Biological Sciences* 581.

¹⁹⁸ Joanna Masel, ‘Genetic Drift’ (2011) 21 *Current Biology* R837. Crick’s related concept of ‘frozen accidents’ refers to traits which arose by chance and persist because they represent no particular disadvantage. The term was first used in Francis Crick, ‘The Origin of the Genetic Code’ (1968) 38 *Journal of Molecular Biology* 367,

¹⁹⁹ Deakin, ‘Evolution for Our Time’ (n 3) 7, 12–13, 35.

²⁰⁰ Text to n 69.

V. Functionalism, 'Evolutionism' and the Naturalistic Fallacy

I end this chapter with a note of caution. The 150-year history of the concept of evolution above sharpens our view of the shades of meaning expressed under the idiom of legal evolution. In particular, it allows us to distinguish between modes of argument that we might otherwise lump together, thereby avoiding a potential source of analytical confusion. Cleaving to this distinction, however, pulls us toward a different hazard, of overestimating the degree to which actual uses respect the distinct boundaries I have drawn on the map of the concept's semantic territory. The emphasis I placed in Part III on the utility of a modern, scientific, neo-Darwinian concept of evolution for theorizing socio-legal change risks leaving the reader with the impression that the older concept of evolution has since lost its relevance in legal circles.²⁰¹

Though many treat evolution as a unitary concept, there are precedents in scholarship on legal change, and on cultural change more broadly, which carefully distinguish between two the concepts. Marion Blute differentiates between *evolutionism* and *developmentalism*. Gunther Teubner, in defending his own theories of legal transformation, emphasizes a distinction between natural selection-based *evolutionary* approaches and an *evolutionism* that carries 'connotations of unilinearity, necessity, directedness and progress.' Zamboni makes a similar distinction between *evolutionary* and *evolutionist*.²⁰² There are differences between the binary schemes these authors have used, and not all of them track the distinctions mapped above. Campbell, one of the key contributors to a tradition that studies cultural evolution as an autonomous process,²⁰³ distinguished his influential approach to socio-cultural evolution, rooted in the Darwinian algorithm, from a class of approaches that sought to trace the possibly diverse 'normal' pathways of development, not just with unitary progress of societies per se.²⁰⁴

²⁰¹ Describing the neo-Darwinian approach as 'modern' or 'contemporary' occludes the fact that the majority of uses in the legal literature likely accord with the Victorian usage, deploying evolution in a way that combines a loose sense of gradual change, universal progress and tacit teleology. McGinley, for example, distinguishes between an admirable evolution in American Title VII jurisprudence that accords with insights from the social sciences about how discrimination works, and an unfortunate counter-evolution that does not. Ann C McGinley, 'Viva La Evolucion: Recognizing Unconscious Motive in Title VII' (1999-2000) 9 Cornell JL & Pub Pol'y 415.

²⁰² Blute (n 91); Gunther Teubner, 'Autopoiesis in Law and Society: A Rejoinder to Blankenburg' (1984) 18 Law & Soc'y Rev 291; Teubner (n 178) 47-49; Zamboni, 'Making Evolutionary Theory Useful for Legal Actors' (n 179) 273.

²⁰³ Above, text to nn 118-122.

²⁰⁴ Campbell (n 101) 21-22.

Despite these examples, there continues to a conspicuous tendency in modern usages to merge attention to mechanism and emergence with an assumption of progressive development. In some cases, this mingling of the two seems to reflect a fusion of the two concepts.²⁰⁵ As Ruse pointed out, vernacular understandings of even biological evolution continue to be rife with a sense that evolution is a teleological, salutary process.²⁰⁶ In fact, in the view of some who have used evolution imprecisely, this connotation of progress is the sine qua non of the term's pertinence. The clearest example here is a broad tradition of legal explanation rooted in neoclassical economics, the 'Coasean' approach explored in Chapters 2 and 3. The work I bring together in those chapters is universally informed by the criteria that mark off what I call the 'scientific' sense of legal evolution. Yet the vast majority of those scholars assume that theories of legal change worked out in accordance with those criteria can be qualified as evolutionary only if they seek to explain or describe the generation of a beneficial, in their case efficiency-promoting, outcome.²⁰⁷

These associations are stronger and more consequential in Hayek's social theory. To say an institution or cultural practice is 'evolved,' in Hayek's parlance, is to do more than indicate that its benefits and functions are the result of an invisible-hand process. It also implies that a surfeit of deliberate intervention in those institutions threatens to destroy what makes them valuable. In Hayek's view, evolution is not just a categorically salutary process. It is also, in some domains, the exclusive salutary process. Given these claims, some have accused Hayek and his intellectual heirs of falling into the naturalistic fallacy, ascribing value to outcomes on the basis of whether or not they occurred 'naturally.' The accusations that Hayek traffics in the fallacy may not hit their mark. Hayek's point is that the virtues of many social institutions are causally attributable to the kind of process that generated them, not that they are virtuous because of how they came about, or that such processes always create virtuous outcomes.²⁰⁸ Nonetheless, lodged within Hayek's understanding of evolution is a continuation of Spencer's conviction that progress, or at

²⁰⁵ Elliot Ackerman Millan offers a theory of 'statutory evolution' that combines the interest in mechanism and emergence with an undeniable stadial/developmental structure. Elliott and others (n 178) 315.

²⁰⁶ Above, text to n 60.

²⁰⁷ Bailey and Rubin are explicit that their approach cannot be called evolutionary because it does not lead to a preferred state. 'Rules that survive are the "fittest" in the sense that they survive, reflecting a temporary balance in the rent-seeking pressures of the day, but little else can be said about them.' Bailey and Rubin (n 152) 469.

²⁰⁸ Erik Angner, 'Did Hayek Commit the Naturalistic Fallacy?' (2004) 26 *Journal of the History of Economic Thought* 349.

least resilience, is born from of a natural process that is discernible through reason, but whose unfolding is necessarily untrammelled by an excess of reason or purpose.

To close this discussion, let me offer some ruminations on the related concepts of function, fitness, and progress by drawing from the philosopher of evolution Daniel Dennett. Dennett uses the example of sleep to show how easily we are misled about what matters in evolutionary processes when we draw on the important and meaningful in our own experience.²⁰⁹ Wakefulness and consciousness seem completely normal to us, as well as eminently useful. Our waking time is when we achieve everything that matters to us and is the part of our day when we pursue the activities that seem most central to evolutionary success, namely eating and sex. Sleep serves no obvious biological function, thus making it a puzzle from an evolutionary standpoint. Dennett argues, though, that it is not sleep which requires an explanation, but rather wakefulness and consciousness. Being awake, mobile, and conscious are energy-intensive activities, and many organisms engage in them sparingly. Think of hibernation. More pointedly, think of trees. Given how little time it takes to feed ourselves or to have reproductive sex, the question is why we spend so much energy 'having adventures and completing projects.'²¹⁰ The amount we sleep might be explicable as an optimum balance between the reproductive benefits of wakefulness and the energy savings of sleep. Dennett was not interested however in the conundrum of why we sleep but in our cognitive delusion that sleep per se requires explanation.

VI. Conclusion

Natural selection may not always choose the fittest forms, but it does cut off very maladaptive forms and, when scarcity makes competition ruthless, selects from between similar forms those that do a better job of reproducing. How easy it is for us, whether through the polysemy of 'fitness' or otherwise, to slip, like Spencer, from natural selection's bias for forms that are better at surviving to the idea that it chooses *better* forms. As Dennett's sleep example shows us, moreover, how easy it is to think that natural selection will choose the forms that accord with our preferences or, better yet, with what we take to be good for us.

²⁰⁹ The discussion draws from Dennett (n 72) 339–40.

²¹⁰ *ibid* 340.

The point extends beyond our biological inheritance, however, to the evolution of cultural forms as well.

2 — Evolutionary Functionalism in an Economic Key

...the activities of man are expended along two routes, the first being directed to the production or transformation of economic goods, the second to the appropriation of goods produced by others.

—Vilfredo Pareto¹

It is ... inconsistent to argue, as Posner does, both that group litigation is more efficient than individual litigation and that group lobbying is less efficient.

—Paul Rubin²

By placing the canonical contributions to an economic approach to legal evolution in contact with two classic arguments concerning the perversity of law-making processes, this chapter reconstructs a generalized, Coasean approach to legal evolution rooted in the interplay of economic interests, legal rules, and behaviour. In the last chapter, I developed some criteria that can be used to distinguish and evaluate accounts of legal evolution, and offered warnings against common analytical pitfalls that bedevil the development of such accounts. This chapter provides a case study in the ways this ambition has been pursued, while showcasing the continuing persistence of a belief in the capacity of ‘unguided’ forces to produce socially beneficial outcomes.

Through the 1970s and 1980s, law-and-economics scholars developed a string of arguments applying economics tools to validate Richard Posner’s notorious claim concerning the efficiency of judge-made law. Their accounts were not only evolutionary in ambition, but were generally described as evolutionary because they were thought to describe decentralized means for achieving salutary outcomes.

¹ Vilfredo Pareto, *Manuale di economia politica*, 444-45, as translated in Arthur Cecil Pigou, *The Economics of Welfare* (Transaction, Transaction Publishers 2009) 128.

² Paul H Rubin, ‘Common Law and Statute Law’ (1982) 11 J Legal Stud 205, 213.

Those arguments suffered from fundamental structural flaws that have never been satisfyingly articulated.³ Part II of this chapter exposes the nature of those flaws through a sequence of comparisons with other well-known accounts of legal change. First, the Posnerian accounts are contrasted with George Stigler's famous argument that rent-seeking is the most important force in democratic law-making, an argument which Posner himself had adopted in contrasting judicial and legislative law-making. The exegesis of Stigler's argument brings two important points to the surface. First, where the Posnerians had drawn from the work of Ronald Coase to suggest that efficient laws will go unchallenged, Stigler emphasized that, under Coase's analytic frame, economic actors will actually have an incentive to move the law away from efficiency if the resulting allocation of rights would benefit them in absolute terms. Where the Posnerians had built their model around a two-person economy, Stigler drew on the work of Mancur Olson to think through how law-making was different when it involved broad classes of economic actors with an interest in legal rules.

On closer inspection, Stigler's pessimism about how the legislative process shapes legal outcomes extends only to contexts where very diffuse interests confront very concentrated ones, as is the case where common consumer goods like gasoline are provided through a small number of firms. One by-product of the argument that led to those conclusions, however, was a general framework for thinking about the interaction between groups with countervailing interests in the content of the law, their relative capacity to organize in service of their interests, and the law actually generated through the actions of individual members.

On the face of it, Stigler's general framework applies only to the legislative context, where collective action in pursuit of joint interests finds familiar expression through partisan coalitions and public lobbying. It is not immediately clear that it applies to the adjudicative context that had been of interest to the Posnerians. A second comparison, between Stigler's argument and Marc's Galanter's classic analysis of anti-social trends in judicial law-making, shows that the differences between the contexts are much smaller than they first appear. Indeed, it turns out to be quite easy to translate Galanter's

³ Paul Rubin, one of the authors of the original studies, did as indicated in the epigraph above eventually come to conclusions similar to those developed in this chapter. But he did not make clear where the earlier theories had gone wrong. Rubin, 'Common Law and Statute Law' (n 2); Martin J Bailey and Paul H Rubin, 'A Positive Theory of Legal Change' (1994) 14 Int'l Rev L & Econ 467.

argument into the conceptual repertoire Stigler deployed, in no small part because they drew on similar conceptual precursors. What the confrontations between the two arguments reveals is a general premise, and a general framework. Law-making in any context is best understood as a confrontation between groups whose primary interest will lie in procuring an allocation of use-rights that advantages them, not necessarily laws whose efficiency generates some aggregate benefit for the public. The actual direction of legal change will be determined by the collective action problems faced by each group, by the ways in which institutions (including law-making institutions) facilitate or impede collective action, and by how those institutions aggregate the actions undertaken by each group.

Parts III and IV review the literature that has since drawn on economic reasoning to predict and model the direction of legal change through either legislative or adjudicative channels. Published scholarship continues to purport to show the efficiency of judge-made law, the primacy of rent-seeking in legislation, or vice versa. In Part III, I argue that the diversity of conclusions in this literature actually vindicates the conclusions implicit in the conclusions of Part II: it is not the high-level mode of law-making (judge-made versus legislative) that determines whether a change in a doctrine or body of law will tend toward efficiency, some narrow interest, or otherwise. Rather, we can conclude from the tight correlation between the conclusions of these arguments and the specifications of the underlying models that real outcomes are dependent on small details as well. The macro-direction of legal change is contingent on micro-features of available legal processes and the nature of the rights at issue. Anyone drawing strong conclusions about the efficiency of judicial or legislative law-making in general is failing to account for these important structural factors.

Part IV reflects on key issues identified in literature on the economic drivers of legal change, which were not directly addressed in any of the key texts given close reading in this chapter. Galanter, Stigler, and the Posnerians all set out to analyse how incentives and institutions would shape a single legal change, and they drew their conclusions about general trends from there. Subsequent literature has made clear that trends are not deducible from repeated applications of the reasoning about the one-off case. Rather, this literature suggests that, even with relatively uncomplicated accounts of institutional constraint and party interests, the long-term behaviour of a legal rule can be cyclical, can

depend strongly on initial conditions, or can even exhibit chaotic, unpredictable dynamics.

A key subtext of the discussion in Part II is that the Posnerians had consistently misconstrued Coase's analytic framework, essentially drawing on Coase's conclusions without understanding the limited contexts to which they can be applied. Engagements with the Coasean framework for understanding the economic consequences of law are also interwoven into the explication of Stigler and Galanter's argument. Thus, for the sake of convenience, Part I explains Coase's framework by explicitly setting it against both the neoclassical market model that he built on, and Arthur Pigou's analysis of externalities that Coase deployed as a foil for his own approach.

This chapter makes a direct intervention in discussions about how economic dynamics, rooted in the confrontation of rival interests, will tend to shape the output of different law-making processes. Though they may be insufficient, accounts based on the interplay of economic forces are not irrelevant to understanding legal change and stasis. The chapter also adds to a growing chorus of criticism against continuing orthodoxies which believe judge-made law superior to legislation, and more broadly that common law systems are superior to civil law systems.

The chapter's contribution to the dissertation is to provide a simple model that works as a stand-in for a broader set of theories which understand legal change as an emergent outcome of interactions between actors with conflicting interests in the content of the law, behaviours that seek to change the law according to their preferences, and institutions which aggregate their behaviours in complex ways. More importantly, it is a strongly formalized, or at least formalized model of emergent, iterative legal change that offers a plausible account without having to account for the knowledge or beliefs of the actors. These implications are elaborated in Part V.

I. Coase and the Economic Consequences of Law: A Restatement

One of the keys to understanding prevailing economic approaches to legal evolution is Ron Coase's foundational work concerning mutually exclusive uses of resources, the impact that transaction costs have on actual uses, and the attendant consequences of law for allocative and distributive outcomes. There are a few takeaways from the discussion

in this part. First, Coase offers a way to analyse the relationship between the use of resources and aggregate output against which the relative efficiency of laws can be measured. Though his approach is compatible with the approaches to law-making and legal change in this chapter, it is not universal. Second, it is useful to keep in mind that the concept of efficiency he deploys is one that measures aggregate welfare against an ideal of the world made up of universally commodifiable and commodified goods, allocated in accordance with exclusively selfish and wholly material preferences. The third point is that the concept of 'social cost' so prominent in discussion of Coase's analysis can easily lead analysis astray. The cost concept is more apposite to the views of Coase's analytical rival Arthur Pigou than to Coase's own analysis. Coase's perspective is not about 'costs' but about the social losses that arise when mutually exclusive uses of the same resources are held by multiple parties who cannot come to some agreement that would allocate those resources to the most productive use. Finally, I emphasize that Coase's framework offers a framework to understand how laws can impact the scale and content of productive output, and to understand how law distributes income between economic actors. This last point will be key if his ideas are to be used correctly in analysing processes of legal change.

A. The Neoclassical Market Model

I begin by contextualizing Coase's contribution against the neoclassical market model, as expressed through Arrow and Debreu's seminal 1954 existence proof.⁴ At the origins of the modern project of economics, especially the neoclassical tradition, is Adam Smith's contention that unfettered market exchange is not only intrinsically right, because it results wholly from voluntary actions, but is also instrumentally valuable, insofar as it maximizes the amount of wealth a society produces.⁵ Until Arrow and Debreu, however, this position was maintained by a combination of inconclusive evidence and professional faith rather than by rigorous investigation.⁶

⁴ Kenneth J Arrow and Gerard Debreu, 'Existence of an Equilibrium for a Competitive Economy' (1954) 22 *Econometrica* 265.

⁵ 'The laissez-faire theory of classical economics was very much concerned with demonstrating the optimality of the competitive market system, or, more generally, the harmony between individual and social interests.' Steven G Medema, 'Of Pangloss, Pigouvians and Pragmatism: Ronald Coase and Social Cost Analysis' (1996) 18 *Journal of the History of Economic Thought* 96, 96.

⁶ Among Anglo-American economists, the Cold War and the rise of marginalism made the task of justifying Smith's account all the more urgent, since the Soviet example and a growing trend of industrial planning suggested that rational, top-down calculation might be the superior approach for the generation of wealth.

Validating Smith's proposition depended on two distinct analytical tasks. For one, Smith's claim could not be tested without some adequate account of 'the market,' namely a representation of the whole economy as an aggregate of self-interested, wholly voluntary actions undertaken by individual producers and consumers. Such a picture was first formalized by Walras' model of competitive equilibrium, depicting the market process as akin to a single mega-transaction in which all exchange and production occurs simultaneously.⁷ On the other hand, sustaining Smith's claim required a rigorous, putatively objective account of what it would mean to maximize welfare, given inevitable differences in subjective judgments about the best allocation of scarce resources. Pareto's conception of welfare maximization, now often called Pareto optimality or Pareto efficiency, offered an ingenious solution. Though Pareto-optimality is a single characteristic of an economy, it is a function of all bilateral combinations of individual subjective judgments about possible alternatives.⁸ The only downside of Pareto's definition is that it does not identify a unique allocation; to the contrary, there are infinitely many Pareto-optimal allocations of a given collection of goods.

With those two formalizations in hand, Smith's proposition could be reduced to the claim that a competitive equilibrium arising from an arbitrary initial allocation of goods will be Pareto-optimal: this premise is now referred to as the first fundamental theorem of welfare economics. Arrow and Debreu made contributions to the proof of the fundamental theorem in the 1950s. Yet those proofs and to some degree the whole edifice suffered from a critical weakness, namely the possibility that a competitive equilibrium might not exist. That possibility threatened both the adequacy of Walrasian equilibrium as a model of market economies and the validity of the welfare theorem as an evaluation of an economy arranged according to that model.⁹ *This* was the troubling prospect

⁷ Donald A Walker, 'Early General Equilibrium Economics: Walras, Pareto, and Cassel' in Warren J Samuels and others (eds), *A Companion to the History of Economic Thought* (Blackwell 2003).

⁸ Formally, an allocation of goods among a set of agents is *Pareto-optimal*—neoclassical economists prefer Pareto-efficient or simply 'efficient'—if no one could be given an alternate, preferred combination of goods without someone else being moved to a less preferable combination. B Lockwood, 'Pareto Efficiency' in *The New Palgrave Dictionary of Economics* (Palgrave Macmillan, London 2018). Pareto efficiency is a deceptively weak normative concept. For instance, if everyone has a positive desire for all available goods, then it could be satisfied by a situation in which one person holds *all* goods. For a particularly striking illustration of its normative limitations, see Michele Piccione and Ariel Rubinstein, 'Equilibrium in the Jungle' (2007) 117 *The Economic Journal* 883.

⁹ Non-existence was not a far-fetched possibility. Arrow himself had analytically demonstrated only a few years earlier that it was impossible to construct a voting system for a group to choose between alternative policies that accorded with basic intuitions about what a fair, democratic outcome would require. Kenneth J Arrow, 'A Difficulty in the Concept of Social Welfare' (1950) 58 *Journal of Political Economy* 328.

exploded by Arrow and Debreu in 1954. Methodologically, their achievement lay in providing a mathematical idiom sufficiently precise to prove the existence of a competitive equilibrium in a model that included production, exchange, and consumption, but without being so restrictive in its assumptions as to completely exclude the possibility of that model's real-world relevance. Substantively, however, their result was the keystone for a vindication of the twin values of the market system. Their result meant that, as an analytical starting point, neoclassical economists could eat their cake and have it, too. At least under certain ideal conditions and within the bounds of a specific formalization, the laudable goal of facilitating voluntary interactions between individuals could be reconciled with the social good of maximizing aggregate welfare.

Coase's paper did not explicitly rely on Arrow and Debreu's results, nor did any of his conclusions follow from or depend on their formalizations. Nonetheless, his contributions and his influence only make sense against the background of the world proven to be formally possible by Arrow and Debreu: the neoclassical market model, in which rational individuals possess, exchange and consume divisible commodities to achieve selfish, material ends, in which voluntary market processes coordinate the production and consumption of goods, and in which the operation of the price system maximizes aggregate welfare. Arrow and Debreu had put the lynchpin in a model of the world that unified procedural justice and utilitarian welfare. Coase had no interest in challenging that paradigm or the ends it valorised. He instead sought to shine light on how economic realities undermined the achievement of those ends, and how gaps between the model and reality might be righted.

B. Deficient Commodification and the Problem of Externalities

There are a host of ways in which this abstracted account of market efficiency fails to map happily onto the actualities of possession, production, and exchange. Two gaps between the model and the actualities are key to understanding Coase's intervention. First, many goods cannot be, or for good reasons generally will not be, arbitrarily divided and exclusively administered in the mode of idealized commodities.¹⁰ Breathable air is a

¹⁰ On the technique, action and perspective necessarily involved in the transformation of goods into commodities, see eg Karl Marx, *Capital: A Critique of Political Economy Volume 1* (Ben Fowkes tr, Penguin 1976) chs 1, section 4 ('Fetishism of the Commodity'); Wendy Nelson Espeland and Mitchell L Stevens, 'Commensuration as a Social Process' (1998) 24 *Annual Review of Sociology* 313; cf Bruce G Carruthers

universal good, but it would be extremely difficult (to say nothing of the inevitable normative objections) to divide, distribute, and administer it as set of market-exchangeable possessions as we do with jelly beans or jalopies.¹¹ Second, even for goods that are possessed and exchanged in ways that are amenable to the market ideal, both the legal guarantee of control over goods and the actual capacity to control them fall short. A mine of examples of these shortfalls can be unearthed in the property law doctrines of nuisance, adversarial possession, and easement, along with those that regulate partition and the divisibility of mineral rights from underlying title. Together, those doctrines cover only a fraction of the areas in which law concerning the disposition of land seeks to manage the technical challenges and unavoidable injustices that hamper the realization of a real property regime in which the use of goods would be entirely conditioned on prior possession or on subsequent appropriation through negotiated, fully-compensated exchange. Other areas of private law treat the difficulties of doing so with other kinds of goods, beyond land.

If we think from a baseline in which individuals ‘have’ all of the goods to which they enjoy even nominal access, then deficient commodification of this sort will necessarily give rise to situations in which the actions of some individuals can add to or subtract from the goods available to others—and critically, without the consent of those others. Private law, by presuming that a given actor or type of actor is the legitimate bearer of a good (and of dominium over its uses), has traditionally dealt with such situations as a harm or deprivation occasioned by another’s wrong. This tradition has generally been concerned with maintenance and approximate restoration of an ex ante allotment of goods, given that we live in a world where it is possible for actual conduct to come into conflict with the normative baseline of the commodity model.¹²

and Arthur L Stinchcombe, ‘The Social Structure of Liquidity: Flexibility, Markets, and States’ (1999) 28 *Theory and Society* 353.

¹¹ On the downsides of commodifying certain goods, whether by subjecting them to market distribution, making them available for purchase, or allocating them by negotiation, see eg Michael J Sandel, *What Money Can’t Buy: The Moral Limits of Markets* (Allen Lane 2012); Debra Satz, *Why Some Things Should Not Be for Sale the Moral Limits of Markets* (Oxford University Press 2010); Guido Calabresi, *The Future of Law and Economics: Essays in Reform and Recollection* (Yale University Press 2016).

¹² The *locus classicus* is Ernest J Weinrib, *The Idea of Private Law* (OUP 2014); on the corrective justice tradition in private law, see generally Steve Hedley, ‘Corrective Justice: An Idea Whose Time Has Gone?’ in Maksymilian Del Mar and Michael Lobban (eds), *Law in Theory and History: New Essays on a Neglected Dialogue* (Hart 2016).

Economists like Coase have generally been concerned instead with the effect that such situations have on aggregate welfare. In the presence of such infelicities of the commodity paradigm, the efficiency of market allocations is no longer guaranteed. Coase's understanding of the relationship between law and welfare has been notoriously easy to misconstrue. Paradoxically, the best way to understand it may be to contrast his view with the older tradition of economic analysis of law, identified with Pigou¹³ and framed using the concept of externalities.¹⁴

Pigou's treatment of the externalities problem emerges from his production-side, top-down version of the neoclassical market model. His analysis was, in particular, situated in a picture of the economy comprising i. a fixed collection of resources ii. being employed across an array of production units iii. each generating some collection of outputs.¹⁵ A highly reductive illustration would be an economy composed entirely of a mine and a railroad, a planner with \$100 to spend between them, and a productive output dependent on how the money is divided between them.¹⁶

¹³ My account of Pigou's analysis draws heavily from RH Coase, 'The Problem of Social Cost' (1960) 3 JLE 1, 28–43. Whether Coase was fair or accurate in his characterization of Pigou's views has been a source of enduring controversy. See eg Nahid Aslanbeigui and Steven Medema, 'Beyond the Dark Clouds: Pigou and Coase on Social Cost' (1998) 30 History of Political Economy 601; AW Brian Simpson, "'Coase v. Pigou' Reexamined' (1996) 25 JLS 53; Herbert J Hovenkamp, 'The Coase Theorem and Arthur Cecil Pigou' (2009) 51 Ariz L Rev 633. Coase himself was equivocal about how well he had captured Pigou's views, finding the exposition in *Economics of Welfare* too muddled to confidently say whether he had accurately captured Pigou's position. Coase's target was not just Pigou, however, but a Pigo(u)vian tradition based on received knowledge about what Pigou had said. See Coase, 'Social Cost' 39–40. Notably, contemporary articulations of the Pigouvian approach to externalities accord well with Coase's account. Eg Agnar Sandmo, 'Pigouvian Taxes' in *The New Palgrave Dictionary of Economics* (3rd edn, Palgrave Macmillan 2018).

¹⁴ Although it is common to discuss both Pigou's approach and Coase's in terms of 'externalities,' neither author used that term. While the concept is a good fit with the Pigouvian tradition, Coase deliberately avoided using the term in 'Social Cost,' because he considered the concept to be incompatible with his own view of the structure of the problem. RH Coase, *The Firm, the Market, and the Law* (University of Chicago Press 1988) 26–27.

¹⁵ Pigou discusses the problem in terms of alternative allocations of resources among 'uses' or 'places.' Arthur Cecil Pigou, *The Economics of Welfare* (Transaction edn, Routledge 2017) 131–35. The text and page references in this edition remain unchanged from the 4th edition (published 1932), which Coase and Stigler both relied on. See Nahid Aslanbeigui, 'Introduction to the Transaction Edition' in Arthur Cecil Pigou, *The Economics of Welfare* (Transaction edn, Routledge 2017) xxxiv–xxxv. To avoid confusion with the meaning Coase ascribes to the 'use' of goods, I have borrowed the term 'production unit' from Arrow and Debreu, which fits well enough with Pigou's meaning for my purposes.

¹⁶ One simplification involved here is that the analysis ignores that the mine and railroad are themselves among the resources to be allocated. Pigou tried to deal with these issues by distinguishing between capital and other resources. For current purposes, however, we can simply treat the production units abstractly, as machines for turning resources into other resources.

Though the optimum against which externality problems was measured was the maximum of national income,¹⁷ the analysis focused on the amount being allocated to a particular productive unit.¹⁸ For the individual productive unit, the operative concept was the *net product*, the output of both positive and negative elements, or services and disservices resulting from the investment of resources in a given enterprise.¹⁹ The value of the net product was accordingly conceived of as a difference (hence *net product*), with the lost value from the negative elements deducted from the gain of the positive ones.²⁰

Roughly speaking, the national income could then be imagined as the total net product, summed across all production units. Maximizing welfare became a matter of allocating resources among the production units in the optimal way.²¹ If every asset had a fixed rate of return, then the ideal strategy would involve investing everything in one asset. Making the reasonable assumption that assets are subject to diminishing marginal returns, however, meant that the optimal strategy would involve spreading the available resources among the assets. And because the average productivity of each investment was different, an optimal allocation would involve each unit being allocated a different amount. Nonetheless, in the optimal allocation, each undertaking would be allocated precisely the amount that ensures that no greater amount could be earned by moving some of its allocated resources elsewhere.²²

The trouble starts because in a market society, the allocation of resources among production units is not made by a single actor, but results from the decentralized action

¹⁷ Pigou was cognizant of the differences between national income, as a dollar-denominated measurement of economic output, and aggregate welfare. He believed however that, *ceteris paribus*, an increase in the former would result in an improvement to the latter. Pigou (n 15) ch VII. Notably, he subscribed to a tradition which believed, contrary both to Pareto and to today's neoclassical mainstream, that aggregate welfare could be increased simply by changing the distribution of national income. *ibid* ch VIII. Pigou primarily referred to national income as the 'national dividend,'

¹⁸ Coase, 'Social Cost' (n 13) 40. For examples, see Pigou (n 15) 134, 172, 183, 185–86.

¹⁹ Pigou (n 15) 131–34, 174, 183. Pigou actually discussed *marginal* net products. The difference made by that adjective to his analysis is not relevant to my account.

²⁰ *ibid* 134–35.

²¹ I note that this abstraction departs from the Arrow-Debreu framing of relative efficiency. Contrary to the Paretian analysis, Pigou imagines the optimum as the maximization of a unitary, cardinal variable. All allocations, that is, can be ordered along a single dimension. The difficulty of reconciling these two frames probably matters for the validity of the Pigouvian view, but I do not try to untangle it here. This issue is related to the controversies surrounding alternate interpretation of the Coase theory, discussed below, n 43.

²² If moving a small amount of resources from one unit to another could produce a higher aggregate output, then the allocation is by definition not the maximum. A short chain of logic shows that the maximum corresponds to the allocation in which the marginal return of investing in a production unit is equalized across all units. Pigou (n 15) 136.

of owners, managers and/or producers.²³ Pigou fully embraced the idea that the private interests of producers would shift resources among production units so as to maximize the total net product, so long as there was full commodification, with each producer allotted all the positive and negative outputs from the assets over which they had control.²⁴ Critically, however, deficient commodification means that the services and disservices produced by an asset may not all flow to the person who decides how much to invest in it. Pigou thus found it useful to distinguish the ‘social net product,’ representing the entire output of goods resulting from the resources employed in a productive unit, from the ‘private net product,’ comprising only the outputs attributable to the actor deciding how much to employ.²⁵

According to Pigou, then, the externalities problem arises from something like a mismatch between balance sheet entries for the producer and society as a whole. In the absence of full commodification, an increment in resources allotted to a given enterprise that augments the positive side of the producer’s ledger might ‘throw’ some of the negatives onto third parties.²⁶ The producer, motivated by an effort to bring the net *private* product of an investment in line with other opportunities, will push the net social product of the investment out of line, leaving national income lower than it could be otherwise.²⁷ In a seminal example, in which sparks from passing trains cause fire damage to neighbouring woods, the decision of the railway company to invest in an additional train may be privately profitable to the train company, but ultimately decrease the value of the total social product.²⁸

C. Alternative Uses, Rights and the So-Called ‘Problem of Social Cost’

Coase offered a sharply different way to make economic sense of market-model infelicities and the welfare shortfalls they can engender. Coase’s entrée to his view was the ‘reciprocal nature of the problem,’ and many have made the ‘symmetry of harms’ the

²³ Pigou spoke, variously, in terms of ‘the person who invests’ in a given production unit, ‘producers,’ and ‘industrialists.’ *ibid* 135, 172, 174.

²⁴ *ibid* 142–43.

²⁵ *ibid* 134–35.

²⁶ The problem was contrasted with a world in which producers would have to pay for negative elements imposed on third parties. *ibid* 134, 183.

²⁷ *ibid* 172.

²⁸ Coase, ‘Social Cost’ (n 13) 28–32.

crux of his model.²⁹ Yet the keystone of Coase's analysis, and its determinative difference from the Pigouvian tradition, is his framing of the problem in terms of disjointed control over alternative uses of goods, not the misallocation of outputs from a particular productive use of those goods.

Coase's first departure from the Pigouvian tradition was to think of various contexts, from conflicts between neighbours to large-scale industrial pollution, entirely in terms of alternative uses of goods.³⁰ Alternative uses are central to the neoclassical market model, not just in the sense that different individuals may end up consuming particular goods, but also inasmuch as they may end up used for consumption or as inputs in the production of other goods. Corn can be eaten by the farmer, used as feed for his pigs, or sold to make syrup. We may be predisposed to think of trampled crops, a noisy examination room, or a factory's contribution to London smog as *harms*. Even Coase was willing to provisionally characterize them this way.³¹ His own conceptual starting point, however, was to treat these situations as no more and no less than competing, incompatible uses of goods. A factory that dumps toxic effluents into a river 'uses' the river for one purpose. Villagers who draw from it for clean drinking water use it for another. When a rancher's cattle trample a neighbouring farmer's crops, that is one use of the field; the farmer eating or marketing untrampled crops is another.

The potential source of the problem as posed by Coase lay in the partitioning of the powers, or 'rights' to pursue and benefit from those rival uses, and their distribution among multiple actors. The factory can discharge effluents into the river but cannot charge people to use it for drinking and bathing; the population downriver could drink

²⁹ *ibid* 2; Nahid Aslanbeigui and Guy Oakes, 'On Coaseana: Critique of a Political Economy' [2015] *Øconomia History, Methodology, Philosophy* 271; Aslanbeigui and Medema (n 13) 603.

³⁰ Pollution that is produced by or affecting a large number of actors raises numerous issues that are not encountered when analysing or responding to 'nuisances,' which only implicate the interests of two parties. Notably, Coase's examples each addressed a scenario with a fundamentally bilateral (Coase uses 'reciprocal') structure. An increase in the number of actors whose use-rights are at stake will both affect the complexity of analysing the situation using Coase's toolkit and, by exponentially increasing transaction costs (see below, n 41) eliminate otherwise-preferable policy options. Some scholars have nonetheless maintained that the structure of the analysis remains fundamentally unchanged, no matter how many individuals' use-rights are at stake. There are, however, reasons to believe that these situations are different not only in degree but in kind. Robin Hahnel and Kristen A Sheeran, 'Misinterpreting the Coase Theorem' (2009) 43 *Journal of Economic Issues* 215, 229–31; Stanislaw Wellisz, 'On External Diseconomies and the Government-Assisted Invisible Hand' (1964) 31 *Economica* 345, 353–54. Though the critique in this chapter of some of the applications of Coase's reasoning resonates with the latter position, I take his interpretation of the problem in terms of a multiplicity of use-rights as a useful basis for the analysis of the law-making context.

³¹ Coase, 'Social Cost' (n 13) 2–10; Pigou (n 15) 184.

the water if it were clean but cannot stop the factory from making the water undrinkable. The rancher can use the neighbouring field as a buffer zone for his cattle but cannot plant his own crops there; the farmer can plant crops but cannot stop the rancher's cattle from trampling them.

A layperson, drawing on a common-sense conflation of property with perfected possession, might ascribe the problem to a legal misalignment of rights or simply to the commission of a wrong. The rancher's cattle should not trample the farmer's crops, nor a fortiori should the rancher have a right for the cattle to trample the crops: that would, per this view, be inconsistent with the very idea of property. A jurist might inquire into whether allowing the trampling is fair or prudent given prevailing expectations, industrial practice, or the history of interactions between the parties. Yet, as an economist concerned with efficiency *qua* maximizing productive output, what concerned Coase about this situation was the possibility that an actor might have the power to use a good in some way, yet lack the capacity to apply it to its highest-value use.

George Stigler, in a text that recast part of Coase's argument as a 'theorem,'³² characterized the resulting misalignment of incentives in terms of a divergence between private costs and social costs.³³ I say *Stigler* characterized the problem in terms of private costs and social costs because, despite the title, 'social cost' appears nowhere in the body of Coase's famous text.³⁴ Coase's conceptual shift from harms to alternative uses corresponded to a sharp departure from Pigou's understanding of costs, as well. Pigou portrayed costs as amounts on the negative side of a balance sheet, to be deducted from any positive receipts of using resources in a productive process. Coase instead had in mind a concept closer to opportunity cost, defined as the maximum value of forgone opportunities to use those resources in an alternative way.³⁵ The dangers of this ambiguous terminology aside, Stigler's usage can be temporarily adopted for the purposes of understanding Coase's views.

³² George J Stigler, *The Theory of Price* (4th edn, Macmillan 1966) 120. On Stigler's invention of the Coase theorem and his important role in the reception of Coase's work, see eg Steven G Medema, 'A Case of Mistaken Identity: George Stigler, "The Problem of Social Cost," and the Coase Theorem' (2011) 31 *Eur J Law Econ* 11.

³³ Stigler (n 32) 110–14. Oddly, Stigler attributed the concepts of social cost and private cost to Pigou!

³⁴ It is interesting to ask, given this fact, whether the 'Problem of Social Cost' in the title is a double entendre, intended to cast the use of 'social cost' as a problem with proper understanding of the policy contexts he was interested in, as well as offering a proper understanding of 'the' problem.

³⁵ Coase, 'Social Cost' (n 13) 39–40. A clear articulation of the opportunity cost concept and an explanation of Coase's reasoning that stresses this dimension appears in Stigler (n 32) 104–14.

To illustrate this approach, let me turn again to the farmer and the rancher, in the absence of any liability for trampling damage.³⁶ The private cost to the rancher of using the farmer's field as a buffer zone for his cattle is *zero*. From his perspective, there is no alternative use whose value needs to be accounted for. Yet from the perspective of society—that is to say, in terms of aggregate output measured in terms of market prices—the *social* cost of using the field for cattle trampling is the value of the foregone alternative, namely whatever price the field's output would have yielded if the crops were not trampled.³⁷

The mismatch between private and social costs is not sufficient on its own to negate the efficiency of the ex post allocation. As Coase emphasized, 'The comparison of private and social products is neither here nor there'; what matters is whether 'arrangements' are such that the goods will be used in ways that maximize the social product.³⁸ There may be many situations where the best alternative use available to an owner of a resource differs from the best alternative use. Where the value of the unaccounted-for alternative use is large enough, however, the goods risk being misallocated to an inefficient use. That is, if and only if the social cost was *greater* than the actual private gain, then the output would not be maximized. If the output from the untrampled crops would have been greater than the rancher would earn from the extra grazing room, then barring some additional arrangement, the allocation of resources will fail to maximize output.

D. The Market for Use-rights, the 'Coase Theorem,' and the Distributive and Allocative Consequences of Law

Having established these conceptual preliminaries, I can articulate a 'Coasean' perspective regarding the consequences of legal rules for both allocative and distributive outcomes.

For a long period after 'Social Cost' was published, the primary interpretation of this analytic framework—the so-called 'Coase theorem'—was that law does not matter for

³⁶ In this paragraph, I have assumed that the field in question can be used exclusively either for cattle-grazing or for crop cultivation. Coase and Stigler both develop the illustration on the basis that the field can be used for various combinations of the two uses, with aggregate returns depending on the particular mix of uses. This difference does not impact the argument, except, I would suggest, by clarifying its fundamental structure.

³⁷ Without any loss of generality, I still assume here that using the field for crops is the highest-valued alternative use.

³⁸ Coase, 'Social Cost' (n 13) 34.

allocative outcomes.³⁹ Some have suggested, under the hypothetical conditions under which the Coase theorem applies, that this theorem is no more than a trivial corollary of Smith's claim about the efficiency of markets.⁴⁰ Not so. Coase's understanding of the problems raised by deficient commodification allowed him to add a subtle nuance to the market model. His innovation was not simply to expand the category of exchangeable goods to include activities previously regarded as bads. Rather, he allowed that there could be a market in the rights to enjoy particular uses of goods, even though some of those uses would necessarily trump others in practice. The townspeople could pay the factory not to dump toxins in their river. The rancher could sell, and the farmer could buy, the former's right to trample the latter's field (that is, the farmer could pay the rancher not to let his cattle trample her field). And if the social product would be maximized by using the field for crops, then, so long as the rancher and farmer did not have to expend any resources on gathering relevant information, conducting negotiations, effecting the transfer, or enforcing the terms of the bargain (if there were, that is, no 'transaction costs'), it would be to both of their advantages for them to do just that.⁴¹

The remarkable upshot of Coase's reasoning was that, from the perspective of allocative efficiency (the net market value of the goods produced), it would not matter how the use-rights were initially distributed, any more than efficiency would depend, in a world of fully commodified goods, on how those goods were initially distributed.⁴² In a world

³⁹ Deirdre McCloskey, 'The So-Called Coase Theorem' (1998) 24 *Eastern Economic Journal* 367.

⁴⁰ *ibid* 368.

⁴¹ Coase referred to these expenditures as 'the costs of carrying out market transactions,' not 'transaction costs.' Coase, 'Social Cost' (n 13) 15. Folk histories of economics generally treat Coase's earlier work on the firm as the seminal contribution to transaction cost analysis, and the use of the concept in 'Social Cost' as a turning point in its usage. The actual story of the concept and its conceptualizations is more complicated, though. Matthias Klaes, 'The History of the Concept of Transaction Costs: Neglected Aspects' (2000) 22 *Journal of the History of Economic Thought* 191.

⁴² Unfortunately for Coase's conclusion, it turns out that the existence of multiple mutually advantageous bargains actually *decreases* the chance of a successfully bargained outcome. Coase's key premise is that reallocating the use-right from the less productive to the more productive user will create a surplus. Against the background of the neoclassical market model, the terms of an exchange of goods is disciplined by the existence of alternative suppliers; this is the function of the 'competitive' predicate in the market model. Both parties are price-takers. Unfortunately, the allocation of a use-right between two parties is not disciplined by the market in this way. Hahnel and Sheeran (n 30) 219–23. Rather, the negotiation over the allocation of the use-right and resulting surplus should be treated as a bargaining game, or a game of 'divide the pie,' which game-theoretical analysis suggests may 'have noncooperative outcomes even when the bargaining process is costless.' This pessimistic conclusion is backed up by experimental findings. Robert Cooter, 'The Cost of Coase' (1982) 11 *JLS* 1, 14ff; Hahnel and Sheeran (n 30) 223–24. Coase himself suggested that the actual division of the surplus from an efficient reallocation would depend on the 'shrewdness' of the parties to the bargain. Coase, 'Social Cost' (n 13) 5. These later discussions have, however, suggested that the shrewdness of the parties can actually be an obstacle to the achievement of an efficient allocation.

without transaction costs, efficiency is insensitive to changes in the law.⁴³ As noted above, Stigler would soon christen this result ‘the Coase Theorem.’⁴⁴

Yet Coase did not aspire to use this result as a model of the real world. Quite the opposite. He was chiefly concerned with clarifying and ultimately correcting the analytical task facing law reformers operating on the basis of cost-benefit analysis.⁴⁵ He was painfully aware that our world is one in which transaction costs *are* relevant. The costs of identifying the appropriate counterparties, engaging in negotiation, and monitoring and enforcing agreements often make the exchange of use-rights—and indeed, the exchange of goods more generally—prohibitively expensive.⁴⁶ In our world, the legal allocation of use-rights often makes a difference to aggregate outcomes. And the goal of law-makers, Coase believed, should be to craft laws that allow total output to be maximized, given the costs of the market or non-market transactions that could be expected to occur under those laws.

One aspect of Coase’s analysis that is generally down-played in the literature is that alternative legal rules will always have distributive consequences, even in the idealized, transaction cost-free world underlying the Coase theorem. This is however central to his characterization of the issues surrounding the legal management of deficient commodification in terms of ‘symmetry of harms.’⁴⁷ The difference between one allocation of a use-right over a resource and another will often amount to a difference in the beneficiary of its productive output as well. The allocation of use-rights among a

⁴³ Competing interpretations of the Coase Theorem can be divided into two varieties. Coase’s central argument has sometimes been interpreted to be that the actual use of goods and, equivalently, the final allocation of rights, is invariant to how those rights are originally delimited. Cooter suggests that this ‘invariance’ interpretation has been universally discredited. Cooter (n 42) 15. The redistribution of rights between the farmer and the rancher, for example, would likely have knock-on effects on the overall demand schedule. This would in turn reshape the relative market demand for, and prices of, all goods, thus at least potentially shifting what counts as the highest-valued use of the field. Because of such income effects, the eventual allocation of goods is not invariant under different original allocations of rights. All that can be said is that the eventual allocation will be efficient in either case (ie Pareto optimal and ‘voluntary’). On these caveats, see eg Richard A Posner, *Economic Analysis of Law* (1st edn, Little, Brown 1972) 17–18, n 1.
⁴⁴ n 32.

⁴⁵ The point of exploring the transaction-cost free world was ‘to show the emptiness of the Pigouvian analytical system.’ Medema (n 32) 16–17 quoting; RH Coase, ‘Law and Economics at Chicago’ (1993) 36 *JL & Econ* 239.

⁴⁶ Coase had already emphasized the costs of market exchange and their importance in explaining the existence of firms in his then-obscure but now-classic text on the nature of the firm. RH Coase, ‘The Nature of the Firm’ (1937) 4 *Economica* 386.

⁴⁷ n 29.

population has just as much impact on final consumption as does the initial allocation of goods in the neoclassical market model.⁴⁸

Coase was perfectly aware that the assignment of rights would have distributive consequences for economic actors;⁴⁹ but he considered those distributive concerns to be distinct and wholly separable from what he called 'the economic problem.'⁵⁰ Indeed, one pithy articulation of the Coase theorem would be that the allocative question, concerning how resources are used, is independent of the distributive question concerning who gets what.⁵¹

Even if this was the case, it is important to distinguish the distributive consequences of law from other distributive questions in the market. In the neoclassical market model, the exchange of commodities between market participants is *productive*, in the sense that it leads to an increase for all participants in the subjective value of all goods possessed or consumed. But it is also *redistributive*, in the sense that the relative market value of the goods possessed by each participant before market exchange occurs are unlikely to be proportional to those which are obtained afterwards. Neoclassical economists have generally been willing to countenance those distributive effects, partially because everyone enjoys absolute gains, and partially because those effects result entirely from the voluntary actions of the participants.⁵² Unlike either the exchange of goods contemplated by the neoclassical market model or the negotiated rearrangement of rights underlying the Coase theorem, a legal change will often (though not always) shift risk, goods, or power over resources among those under its jurisdiction without the

⁴⁸ The common practice of describing the Coase theorem using phrasing like 'In the absence of transaction costs, the allocation of resources is independent of the initial assignment of property rights,' likely tends to misconstrue this reality. See WE Shuggart II, WF Chappell and RL Cottle, *Modern Managerial Economics: Managerial Theory for Business Decisions* (South-Western 1994), cited in McCloskey (n 39) 367. Those who speak in such terms will generally mean only that resources will be allocated to their most productive uses, not that the distribution of the resulting income or final goods will be unimpacted. Yet the failure to carefully appreciate the distinction between an allocation of resources and a distribution of goods is a foreseeable source of confusion about Coase's argument.

⁴⁹ Coase, 'Social Cost' (n 13) 5, 15. In an important sense, Coase provided one of the earliest mathematically rigorous formulations of the distributional consequences of legal change that had been emphasized by an earlier generation of law and economics scholars. See eg Robert L Hale, 'Coercion and Distribution in a Supposedly Non-Coercive State' (1923) 38 *Political Science Quarterly* 470; Morris Cohen, 'Property and Sovereignty' (1927) 13 *Cornell L Rev* 8.

⁵⁰ Coase, 'Social Cost' (n 13) 15.

⁵¹ This would be true if the invariance interpretation of the Coase theorem were correct. Under the efficiency interpretation, distribution does matter for the content of the ex ante output, but not to its efficiency. On these competing interpretations of the Coase theorem, see above n 43.

⁵² Through the market process, '[r]edistributions occur, but purely as incidents to voluntary transactions.' Posner, *Economic Analysis of Law* (n 43) 329.

universal consent of those affected.⁵³ Changes in the law are not only redistributive but specifically, as Stigler would later put it, coercive.⁵⁴

II. Efficiency and Rent-Seeking in the Evolution of Legal Rules

A. From Posner's Efficiency Thesis to Posnerian Models of Judicial Law-making

Among the scholarship now treated as canonical in the circa-1980 revival of legal evolution is a set of papers that used tools from the burgeoning economic analysis of law to model trends in judge-made law. Those papers found their inspiration in Richard Posner's notorious claim that the common law is efficient (or at least that it 'tends to promote efficiency').⁵⁵ As Posner later made explicit, this claim necessarily entails a theory of legal change: if a common law rule presently embodies some efficient allocation of risk, goods, or control over resources, then there not only must have been some event or series of events that generated 'the' efficient rule but there must be some historical process that allows prevailing rules to be responsive to shifting economic conditions.⁵⁶ If the claim that common law rules and doctrines are efficient is to be credible, therefore, there must be some plausible account of how those rules and doctrines might have gotten that way. On the nature of that process, however, Posner initially provided little useful guidance. He drew some loose parallels between the market and the litigation of private rights, by noting a shared dependence of (re)allocation through private initiative, mapping the judge's decision between alternative rules onto 'competition' based on consumer choices, and describing the judge's impartiality as somehow akin to the invisible hand of the market.⁵⁷ Those parallels could have been used to suggest a mode

⁵³ Stigler spoke of the 'compelled universality' of legal change. George J Stigler, 'The Theory of Economic Regulation' (1971) 2 *The Bell Journal of Economics and Management Science* 3, 10.

⁵⁴ *ibid* 4.

⁵⁵ Posner, *Economic Analysis of Law* (n 43) ch 5; Richard Posner, 'Some Uses and Abuses of Economics in Law' (1979) 46 *U Chi L Rev*, 285. The analysis of legal rules in terms of their capacity to shape both the market and non-market behaviour of self-interested actors stretches at least as far back as Bentham. Though Coase's seminal article, 'Social Cost' (n 13), provided a framework for analysing the net output/cost consequences of alternative legal rules under the presence of transaction costs, Posner seems to have been the first to suggest that the preponderance of existing common law rules were optimal, or at least quasi-optimal, by that metric. For a rough outline of this history, see Posner, 'Some Uses and Abuses of Economics in Law' 283-86.

⁵⁶ William M Landes and Richard A Posner, 'Legal Change, Judicial Behavior, and the Diversity Jurisdiction Change in the Common Law' (1980) 9 *J Legal Stud* 367, 367.

⁵⁷ Posner, *Economic Analysis of Law* (n 43) 320-25.

by which legal rules moved toward efficiency, in a process akin to Armen Alchian's account of institutional evolution under market competition.⁵⁸ But Posner did not pursue this analogy. Instead, he seemed to think of these loose parallels as sufficient to earn the common law process the same dint of efficiency he ascribed to the market.⁵⁹

Given the explanatory gap Posner had left open, his thesis spawned a host of attempts by law-and-economics scholars to account for the mechanisms that might produce his hypothesized outcome. One postulate was that judges might simply choose the most efficient rule by applying their reasoning faculties to available information.⁶⁰ Several scholars pursued models of this sort.⁶¹ This explanation had a number of disadvantages, however. The first was its incompatibility with the extensive evidence about how judges actually make their decisions, provided in centuries of published legal judgments *not* expressed in terms of economic efficiency.⁶² The second was the difficulty that judges would face in choosing the economically efficient rules, were they actually motivated to do so.⁶³ The third issue was methodological: such arguments relied on unverifiable suppositions about the judicial reasoning process.⁶⁴ Perhaps the most important problem with this explanatory move was its violation of an admitted partiality among economists of a certain stripe for invisible-hand explanations of social phenomena, especially for explanations rooted in aggregates of self-interested behaviour.⁶⁵

⁵⁸ Armen A Alchian, 'Uncertainty, Evolution, and Economic Theory' (1950) 58 *Journal of Political Economy* 211.

⁵⁹ See for example his reference to 'the market-common law process,' and his intuition that common law rules emulate the outcomes that would be produced by market competition. Posner, *Economic Analysis of Law* (n 43) 329; Posner, 'Some Uses and Abuses of Economics in Law' (n 55) 288–89.

⁶⁰ Posner's primary account of the link between common law decision-making and economic efficiency is that the judge's common sense or intuition would usually lead to the efficient standard. See Posner, *Economic Analysis of Law* (n 43) 99, 327.

⁶¹ Obviously, if judges prefer the most efficient rules, and have the capacity to correctly select those rules from among the available alternatives, then their decisions will tend to produce *de jure* efficient rules. Cooter, Kornhauser and Lane, however, also showed how a series of litigations before judges with only partial information about the marginal effect of different rules on costs for various parties could still gradually produce a liability rule that minimizes the combined resources expended on accidents and spending on avoidance. Robert Cooter and others, 'Liability Rules, Limited Information, and the Role of Precedent' (1979) 10 *The Bell Journal of Economics* 366.

⁶² Robert Cooter and Lewis Kornhauser, 'Can Litigation Improve the Law without the Help of Judges' (1980) 9 *JLS* 139, 139–40.

⁶³ George L Priest, 'The Common Law Process and the Selection of Efficient Rules' (1977) 6 *JLS* 65, 66.

⁶⁴ *ibid*; John C Goodman, 'An Economic Theory of the Evolution of Common Law' (1978) 7 *J Legal Stud* 393, 393.

⁶⁵ Paul H Rubin, 'Why is the Common Law Efficient' (1977) 6 *J Legal Stud* 51, 51; Cooter and Kornhauser (n 62) 140. Invisible-hand explanations and their relation to evolutionary thought are discussed in Chapter 1.

Most attempts to explain Posner's hypothesis thus undertook to show how efficient rules could be produced by broader characteristics of the legal process, rather than resulting from judicial behaviour alone. The goal was to illuminate how rules seemingly designed to distribute resources efficiently could arise from a series of legal disputes in which judges chose the applicable standard in adjudicated cases at random—that is, according to some probabilistic, rather than reasoned, standard.⁶⁶ One family of models, starting with a paper by Paul Rubin, rooted the mechanism in *selective litigation*: the key to the process in such models is that disputes associated with higher costs are more likely to be litigated (and existing rules challenged) than settled (leaving existing rules in place), meaning inefficient rules will be challenged in court more often than efficient ones.⁶⁷ Other models turned on the *differential expenditures* of the litigants: the premise in these papers was that more money will be spent on trying to overturn inefficient rules than on trying to overturn efficient ones, increasing the chance that more efficient rules will be favoured over time.⁶⁸

These Posnerian accounts of legal change through private dispute resolution were also Coasean in two related senses. First of all, they followed Posner in identifying the relationship between law and efficiency in Coasean terms. As Posner put it in describing his approach to both contract and property, 'the economic test ... is whether the imposition of liability will create incentives for value-maximizing conduct.'⁶⁹ Second, their arguments took advantage of Coase's idea that private parties could in some contexts privately negotiate the exchange of use-rights. As will be shown, however, their

⁶⁶ Given inconsistent usage in practice, there is some risk of confusion in what follows about the meaning of the terms 'legal dispute,' 'litigation,' and 'adjudication.' Galanter, whose work on the implications of common law dispute resolution for trends in doctrine is discussed below, text to nn 112–134, distinguishes *litigation* of disputes, which can include claim-making, negotiation, abandonment and settlement of those claims, as well as resolution of the dispute through trial, from *adjudication*, which refers narrowly to the resolution of the dispute via a judge's decision. Priest and Klein, by contrast, use *dispute* to name all situations where a legal claim has been made by one actor against another, and identify *litigation* only with resolution through trial. George L Priest and Benjamin Klein, 'The Selection of Disputes for Litigation' (1984) 13 JLS 1. For the sake of consistency, this chapter and Chapter 3 use 'legal dispute' or 'dispute' to discuss claims that have been made, 'litigation' to discuss the resolution of disputes through a trial, and 'adjudication' to refer narrowly to the judge's application of legal reasoning to the facts and arguments to render a judgment. I have furthermore used 'case' only to discuss disputes resolved through the trial process.

⁶⁷ Rubin, 'Why is the Common Law Efficient' (n 65); Priest (n 63); Cooter and Kornhauser (n 62).

⁶⁸ Goodman (n 64); Arthur Denzau, 'Litigation Expenditures as Private Determinants of Judicial Decisions: A Comment' (1979) 8 JLS 295.

⁶⁹ Posner, *Economic Analysis of Law* (n 43) 43–44. Though allocating use-rights to address prima facie inefficiencies not amenable to private resolution because of transaction costs was Posner's primary mode, many of his examples dealt with a different strategy that Coase had never considered: to use law to *reduce* transaction costs and thereby allow the efficient allocation to arise through private arrangement.

arguments were founded on a fundamental misunderstanding of the implications and limitations of Coase's reasoning in the analysis of law-making. I will have more to say, below, about the limited capacity of these arguments to account for the purported efficiency of common law rules and, eventually, about their adequacy as accounts of legal change more broadly. But both of these points will be easier to make once these accounts of the processes that fix and reshape common law rules—that is, judge-made law—are contextualized against kindred accounts of the processes that produce legislation.

B. Rent-seeking and Collective Action Problems in the Making of Statutes and Regulations

Posner expressly contrasted his claim about the efficiency of rules produced through the common law process with his gloomier conclusions about the factors that shape the rules produced by legislators and administrative bodies.⁷⁰ In part, he sought to explain that contrast by reference to possible differences between the acceptable modes and objects of reasoning in the two settings: it might be that judges are simply constrained to consider different issues than are legislatures.⁷¹ Primarily, though, he drew his arguments about the putative inefficiency of legislation directly from a foundational contribution to public choice theory, Stigler's "Theory of Economic Regulation."⁷²

At a high level of abstraction, Stigler also framed law-making as a sort of market, with the amount and type of regulation representing an equilibrium of regulatory supply and demand.⁷³ In practice, the market metaphor provided him with little analytical mileage;⁷⁴ his paper was at base an effort to develop and lend credibility to an invisible-hand explanation of legislative law-making.⁷⁵ In particular, Stigler wanted to explain laws

⁷⁰ *ibid* 327–32.

⁷¹ *ibid* 328–29.

⁷² *ibid* 329–32; Stigler (n 53).

⁷³ Both the abstract of the paper and its overall structure suggest that the value of regulation to industry players can be understood as the source of demand for regulation, while the processes that produce regulation condition its supply. The novel terminology he associated with his theory, 'acquired regulation,' likewise suggests that regulation is 'purchased' by industry. See especially Stigler (n 53) 3, 11. In addition to the problems that Stigler's model ultimately raised for the 'efficiency of the common law' arguments, elaborated in what follows, his use of a loose market metaphor to outline the deleterious effects of the regulatory process demonstrates Posner's naiveté in treating the existence of a rough homology with market processes as sufficient to draw any conclusions about the nature or desirability of the outputs of that process.

⁷⁴ Despite the frame of the paper, Stigler admitted that 'the political decision...is fundamentally different from that of the market.' *ibid* 10.

⁷⁵ See Chapter 1 on invisible-hand explanations.

entirely as an emergent outcome of interactions between rational, self-interested actors behaving strategically under exogenous constraint.

Now we need to be careful in following the route Stigler laid out from this starting point, because ‘emergent outcomes of interactions between rational self-interested actors’ is also the foundation of the neoclassical market model. Whence Stigler’s pessimism about the inefficiency of the outcome in the ‘market’ for legislation? The key difference lies in the contrast between the interests and incentives that arise in the context of establishing *ex ante* rights and those that are relevant when parties seek to rearrange rights *ex post*.

The Coase theorem suggests that economic actors, in a way that parallels the market exchange of goods, will reallocate use-rights so as to maximize output, so long as conditions favour them doing so. Beyond this result being limited to contexts with sufficiently low transaction costs, the argument that parties could bargain for an efficient *ex post* distribution of goods depended on the prior delineation of a clearly-defined and mutually understood allocation of rights in those goods.⁷⁶ Coase addressed neither the capacity of economic actors to bargain efficiently in contexts where the original rights were uncertain, under threat, or incomplete, nor—and this is absolutely key—the agencies, interests, or processes by which the ‘initial’ rights might be shifted or transformed.⁷⁷ This critical point was regrettably obscured by his imprecise language regarding the distinctions between legally-established rights, actual control over uses, and the hypothetical *ex post* arrangements to be put in place through bargaining between the parties who start with some prior allocation of rights. Whether it was (1) discussing the result of bargaining between the parties about how resources are to be used (and the resulting income distributed) as a ‘rearrangement of rights,’⁷⁸ (2) suggesting that it was possible to ‘change the legal delimitation of rights through market transactions,’⁷⁹ or (3) invoking a ‘legal system of rights which can be modified by transactions on the market,’⁸⁰ Coase’s exposition muddled the distinction between the *ex ante* distribution of rights universally assigned by courts to classes of actors in a given type of fact-situation on the

⁷⁶ Coase, ‘Social Cost’ (n 13) 8.

⁷⁷ As Coase himself later emphasized, ‘Social Cost’ was concerned only with what he called ‘the study of the influences of the legal system on the working of the economic system’ and not at all with ‘the economic analysis of law’ which addresses how economic factors might shape the legal system. RH Coase, ‘Law and Economics and A. W. Brian Simpson’ (1996) 25 JLS 103, 103–05.

⁷⁸ Coase, ‘Social Cost’ (n 13) 10.

⁷⁹ *ibid* 9, 15, 19.

⁸⁰ *ibid* 15, 17.

one hand and, on the other, the particular ex post arrangement of activities and benefits that individual actors might negotiate in situations where those legally-defined rights were relevant.

The difference between these two contexts is profound. The possibility to effect coercive redistribution has neither certain nor direct implications for efficiency, but its indirect consequences are potentially severe.⁸¹ And because they approached the question with acutely different goals in mind, Stigler and Coase came to nearly opposite conclusions about what those consequences might be.

Whether it came to dealing with externalities or regulating radio frequencies, Coase was concerned with the normative question of how to maximize allocative efficiency.⁸² As noted above, he understood that the (re)allocation of use-rights would also entail a (re)distribution of income among the population, but thought that these distributive questions could be ignored for the purposes of thinking about how to maximize output. In a world in which productivity-maximizing allocations of resources might not come about because of the high costs of conducting the relevant bargains, Coase believed that the redistribution of rights, including by judges, would often be the preferable policy response to the economic problem—certainly superior to solutions using non-compensatory taxes endorsed under the Pigouvian tradition.⁸³ In particular, he understood the shortfall in actual aggregate production as a shared problem whose optimal solution could take many forms and would ultimately depend on the context in which it arose. And he saw ‘economists and policy-makers’ as part of a unitary ‘we’ charged with designing and implementing solutions to that problem, and lacking only the knowledge to do so correctly.⁸⁴

The primary goal of Stigler’s model, by contrast, was analytical, not normative. Yet the dichotomy between analytical and normative does not reduce down to a gap between how some group should conduct themselves and how they actually do. Stigler’s argument, and Posner’s by proxy, about the origins and nature of democratic legislation was *not*

⁸¹ Above, text to nn 52-54

⁸² On Coase’s approach to radio frequencies and property rights, see Ronald Coase, ‘The Federal Communications Commission’ (1959) 2 JLE 1.

⁸³ Coase, ‘Social Cost’ (n 13) 19–28, 39–42.

⁸⁴ *ibid* 18, 43; Aslanbeigui and Medema (n 13) 605 quoting Ronald Coase, ‘Social Cost and Public Policy’ in George A Edwards *Exploring the Frontiers of Administration: Six Essays for Managers* (York University Faculty of Administration Studies, Bureau of Research, 1970).

concerned with how beneficent policymakers select laws best suited to addressing a pressing social need, be it efficiency or otherwise.⁸⁵ Rather, Stigler expressly constructed his model, like the evolutionary accounts of the common law's efficiency, in contradistinction to accounts of law as a product of deliberative, public-spirited reasoning.⁸⁶

In the place of Coase's benevolent, welfare-focused policymakers, the centrepiece of Stigler's model was a decision-making mechanism whose output, roughly speaking, was a function of the interests of various economic agents in the state of the law, weighted by their power. Economic actors would seek to shape the law in their own interest, not in the public interest.⁸⁷ Policymakers in Stigler's model were no more than midwives of that process; the will of the sovereign, no more than its rubber stamp.

In Coase's model, each actor is constrained by their initial allocation of goods, resources, and rights, but also limited to a repertoire of strategies that includes variations on 'exchange with other actors' using those allocations. The opportunity to shift *ex ante* legal entitlements by contrast creates the possibility of engaging in another strategy that might best be described as expropriation.⁸⁸ This distinction requires some clarification. It is *possible* to imagine the conduct of law-making as something like a mutually consensual, universally beneficial bargain, with the legislator merely granting the resulting arrangement the status of law. Take as an example a world of ranchers and farmers like those in Coase's paradigmatic example, subject to an inefficient regime of strict liability for crop trampling. If all the farmers and all the ranchers could bargain together regarding the allocation of liability, then they might shift from a prior regime of strict liability to one in which ranchers were no longer liable, with farmers being compensated for the corresponding loss of the use of their marginal land.⁸⁹ Of course, in a world without

⁸⁵ As indicated by the title of the paper, Stigler's nominal subject was regulation rather than legislation *per se*. The intended targets of his critique were four kinds of economic policy he considered to be generally, if not universally, inefficient: subsidies to producers, control over competitive entry, regulation of product substitutes or complements, and the direct fixing of prices. Stigler (n 53) 4–6. Nonetheless, section two of his paper is explicitly entitled 'the costs of obtaining *legislation*' and the model set out in that section is concerned with what he sees as shortcomings intrinsic to law-making through democratically-elected lawmakers, rather than with the perverse outcomes that stem from particular areas or modes of policy. *ibid* 10–13.

⁸⁶ Stigler (n 53) 3–4, 17–18.

⁸⁷ *ibid* 4.

⁸⁸ Like 'harm' or 'cost,' expropriation is a morally freighted word that is hard to invoke without suggesting that the incident redistribution of rights, wealth or control over resources is in some sense wrongful. Nonetheless, I use the word here only for its distinctive sense of a non-*consensual* transfer.

⁸⁹ cf Coase, 'Social Cost' (n 13) 4–5.

transaction costs, there would be no interest in trying to change the law in this way; individual farmers and their neighbouring ranchers could simply bargain to reallocate the rights themselves. Yet in a world with transaction costs, bargaining for such a large scale, legislative reallocation of rights might save enough on costs, compared to conducting the individual bargains, to make available an efficient but otherwise impracticable use of the land. As Coase himself put it, '[e]ven when it is possible to change the legal delimitation of rights through market transactions, it is obviously desirable to reduce the need for such transactions and thus reduce the employment of resources in carrying them out.'⁹⁰

Though this is a plausible scenario, the legislative process does not generally place the same structural constraints on reallocations that market exchanges do. As with the market process, the ranchers in my example will have an incentive to change the law to the more efficient allocation. But they will only have an incentive to compensate the farmers for that change if doing so is somehow made a condition of effecting that reallocation. And, unlike in the market context, whether compensation to the farmers becomes an effective precondition is a contingent function of the effective power of the farmers, ranchers, and others over the state of the law. The greater issue is that, without the gratuitous assumption that a legislative reallocation of rights will require the beneficiaries to compensate the losers, it will also be in each party's interests to shift the law *away* from any efficient allocation, so long as doing so allows them to enjoy a larger absolute portion of the resulting smaller pie. Indeed, even under an assumption of no transaction costs, in which Coase's reasoning suggests either arrangement will be efficient, each group will still have an interest in shifting the law in their favour.⁹¹ In more contemporary terms, Stigler's first premise was thus that the law-making process gives economic actors an incentive to engage not only in productive bargaining, but in counterproductive *rent-seeking*.⁹²

⁹⁰ *ibid* 19.

⁹¹ To see this, we can imagine the law moving from an efficient initial allocation to an inefficient reallocation. If we maintain the assumption that cattle grazing is the more efficient use, that would mean the use-right moving from ranchers to farmers. The individual farmers could still subsequently bargain to transfer the use-rights to the ranchers, in which case, they would get paid for a right they did not possess before the law was changed.

⁹² The term 'rent seeking' is due to Krueger, though the concept is generally attributed to earlier work by Tullock. The concept has been used with a variety of meanings, only some of which correspond to Tullock's original analyses. It is broad enough to include any effort to obtain benefits through political channels that entails uncompensated costs for other actors, though there is in particular inconsistency about whether it necessarily implies some net social loss. It may not be entirely appropriate here, since the emphasis per

The analytical consequence for legislative law-making is that a legal change may represent first, a coercive, redistributive, but ultimately productivity-improving reallocation of a use-right from a less to a more productive right-holder; or, second, a coercive, redistributive, and ultimately inefficient allocation from a more to a less productive right-holder; or, third, a quasi-consensual quid pro quo in which rights move from less to more productive users, in return for some appropriate compensation. If the analysis were to stop there, determining which category captures a particular legal change would remain an empirical question whose answer depends on the balance of effective power between self-interested groups. But Stigler's analysis did not stop there. It instead traced an analysis of effective power all the way through to his pessimistic conclusions.

To understand this other leg of Stigler's argument, it is useful to translate his account of rent-seeking into the language of collective goods and collective action developed by Mancur Olson.⁹³ Collective goods are distinguished from private goods by non-excludability: once produced, they allow a whole class of beneficiaries to gain, rather than just the parties that helped to produce or procure them.⁹⁴ While non-excludability is also at the heart of the earlier concept of a public good, for a collective good the shared benefits are limited to members of some group, and in some cases may be procured only to the detriment of non-members or the general public.⁹⁵ Olson's key claim is that pursuit of a collective good presents a collective action problem for the group that will benefit from it. At least in general, the larger the group, the more severe those problems.

Tullock's approach is on the wasted resources spent on competition over the transfers occasioned by state action (process losses), rather than, per Stigler, on the inefficiencies attributable to the outcomes of those competitions (substantial losses). Nevertheless, we can proceed with this difference of emphasis in mind. Gordon Tullock, 'The Welfare Costs of Tariffs, Monopolies, and Theft' (1967) 5 *Economic Inquiry* 224; Anne O Krueger, 'The Political Economy of the Rent-Seeking Society' (1974) 64 *American Economic Review* 291; see generally Robert D Tollison, 'The Economic Theory of Rent Seeking' (2012) 152 *Public Choice* 73.

⁹³ Mancur Olson, *The Logic of Collective Action: Public Goods and the Theory of Groups* (Harvard University Press 1971). Stigler's paper cited Olson, and the structure of his argument maps tidily onto Olson's analytical frame. Laffont and Tirole interpret Stigler's argument as a direct application of Olson's. Jean-Jacques Laffont and Jean Tirole, 'The Politics of Government Decision-Making: A Theory of Regulatory Capture' (1991) 106 *The Quarterly Journal of Economics* 1089, 1089–90. Posner's version of Stigler's argument is also more obvious in its intellectual debts to Olson's analytical toolkit.

⁹⁴ Earlier work used 'public goods' primarily to emphasize goods with non-excludability of consumption, that is to say, goods that, once produced, could be enjoyed by any member of the public. In introducing his alternative, 'collective goods,' Olson stressed that the production of certain goods might provide a mutual, non-excludable benefit to some delimited group not available to outsiders. He also used the term more expansively, to include the satisfaction of any mutual interest rather than just the provision of consumable goods. Olson (n 93) 14–15.

⁹⁵ *ibid* 15, n 22.

Groups face two kinds of problems in the pursuit of collective goods.⁹⁶ The first is the challenge of distributing net benefits, given the costs of ‘production.’ Like private goods, the production of collective goods has direct costs. Lighthouses must be built, roads must be maintained, politicians must be lobbied, and members of the public ‘educated.’⁹⁷ Whether members of the group benefit equally from the production of a good, or proportionally based on variation in some characteristic,⁹⁸ members of the group will be interested in minimizing their own contribution to those costs. Where the minimal outlay of costs required to produce some amount of the good outweighs the marginal benefit to individual members, no one would have the incentive, acting independently, to expend the resources necessary to produce the collective good.⁹⁹ But even where the direct costs are low enough that an individual can pay the entire cost and still enjoy a net benefit, the group could face a situation captured by the theory of non-cooperative games. Absent some coordination between the members, the result predicted by traditional game theory would be for each individual member, acting rationally, to contribute nothing toward the cost, since this would leave them better off regardless of the actions taken by the other members.¹⁰⁰ Even though *any* positive distribution of the costs between the members would generate a preferable outcome for all members, the aggregate result would be for no one to contribute anything toward the cost. As the size of the group grows, the less an individual can expect their contribution to make a difference to whether a good is established or to how much of it they can expect to receive.

Of course, it would be in the interest of all members of the group to come to some sort of prior agreement to divide these direct costs amongst themselves. Indeed, even a sufficiently large subgroup would benefit if they agreed to share the costs of creating a good for the broader class. Olson’s key intervention was to underscore that such arrangements do not come for free. Discovering possible goods, identifying members of the group, convincing individuals of the benefit, bargaining about how costs will be distributed, and, where necessary, monitoring and enforcing cost-sharing agreements: all

⁹⁶ Though Olson distinguishes between three difficulties facing the group, the first two are somewhat hard to distinguish. Recast in probabilistic terms, the point is that an individual member’s expected returns from an investment in a collective good decrease with group size, so that, without some coordinating mechanism, it can quickly become negative as the group size surpasses one. Compare *ibid* 48.

⁹⁷ cf Stigler (n 53) 12.

⁹⁸ As would be the case, for example, with a subsidy given to corn producers proportional to the total value of the corn each produced.

⁹⁹ Olson (n 93) 11–12.

¹⁰⁰ *ibid* 43–44, 50 n 70.

of these tasks entail what Olson called *organization costs*.¹⁰¹ Because the costs of coordination will generally rise with group size, larger groups, relative to smaller groups, would again be disadvantaged in pursuing their joint interest.

Olson's overall conclusion not only exposed the fallacies of theories that derived predictions about group behaviour solely from an analysis of the members' shared interests, but pointed specifically to the negative correlation between a group's size and its capacity to pursue those interests.¹⁰²

Structurally, Stigler's theory was thus an application of Olson's theory to the confrontation between two groups with directly opposing interests.¹⁰³ The establishment of a given legal rule, subsidy, or regime will often amount to the creation of a collective good. Under the right conditions, a given norm may be a public good in the more traditional sense that, once established, it provides a benefit to everyone under its jurisdiction.¹⁰⁴ But as discussed above, laws that allocate rights, duties, liabilities, and powers will generally have coercive, distributive effects that disadvantage some group even while they benefit others. The selection between any two states of a law, like the existence or non-existence of liability on ranchers for trampling their neighbours' crops, thus becomes a contest over which of two mutually exclusive collective goods will be established, and thus a conflict of interest between the groups who are the potential beneficiaries of each alternative. Though there may be some external indicator about which state of the law is preferable—say, because it is more efficient—from the perspective of the two groups, the problem is symmetrical. In one state of the law, one group wins and the other loses; in the other state, vice versa.¹⁰⁵

¹⁰¹ *ibid* 46–47.

¹⁰² *ibid* 1–3, 43–48.

¹⁰³ On Stigler's relation to Olson, see above n 93.

¹⁰⁴ Laws establishing or amending a distribution of rights over or liabilities for various uses of goods among various types of parties may, per the Coasean paradigm, promote the *efficient* allocation of those goods. See above, text to nn 82–83. But this is no guarantee, and will in fact seldom imply, that the establishment of those laws is in everyone's interest. Nonetheless, there may be laws that, at least in their first order effects, are in everyone's interest, the archetype being a rule that drivers must use one side of the road and not the other. See eg Lon L Fuller, 'Law as an Instrument of Social Control and Law as a Facilitation of Human Interaction' [1975] *BYU L Rev* 89.

¹⁰⁵ Note that the conflict is not properly framed in terms of the presence or absence of a *rule*. The choice can only ever be between two states of the law, each of which will distribute rights, resources and benefits in a given way. There is a rule, or usually rules, in either case. This was part of the lesson of Hohfeld's ground-breaking work, that the absence of a prohibition is a license, the absence of a liability an immunity, etc.

Unlike later literature on regulatory capture, which focused on the risk of quasi-independent agencies such as the United States' Securities Exchange Commission, Federal Communications Commission or Environmental Protection Agency being effectively captured by regulated industries,¹⁰⁶ Stigler's model was based primarily on the factors that shape the behaviour of legislators and their parties.¹⁰⁷ Nor did Stigler develop a model of legislative law-making in which the relevant conflict played out between two producers, such as ranchers and farmers. Rather, he focused on regulations for which the benefits to a producer group were outweighed by losses for consumers (equivalent to a transfer plus a deadweight loss). Specifically, he directed his attention to industries for which the body of consumers was very large, like doctors and lawyers, trucking, and 'big oil.'

With that setup, his model could be recast as a confrontation between a democratic majority with an interest in preventing a regulation, and industry players with an interest in attaining it.¹⁰⁸ Here, Olson's toolkit came into play. Even though consumers as a whole would benefit if the regulation were avoided, individual consumers would have no incentive, either to change their own vote or to try rallying other voters to prevent its passage. Even if the aggregate losses were very high, the per-capita benefits of avoiding them are very low and, specifically, outweighed by the costs of learning about and acting on the issue.¹⁰⁹ The distribution of costs and benefits ultimately makes the individual voter a bad representative of the consumer class when she acts at the ballot box. By contrast, the group with a stake in the benefitted industry has two advantages. Because the benefits are relatively concentrated, individual industry stakeholders have much more to gain from acting to attain the regulation: voting on the basis of the rule, and convincing others to support it, offers them a much higher expected return than doing

¹⁰⁶ See eg Laffont and Tirole (n 93).

¹⁰⁷ One attempt at mathematical formalization is attempted in Sam Peltzman, 'Toward a More General Theory of Regulation' (1976) 19 JLE 211, 213-22.

¹⁰⁸ Strictly speaking, there might not be any democratic majority with a direct interest in preventing the promulgation of an inefficient rule. The inefficiency of a rule implies only that there are net losses. Stigler's argument seemed to depend on the idea that everyone would buy some good so that, following the passage of an inefficient rule, everyone would now be paying a higher price. Everyone would be worse off, save the minority comprising beneficiaries of the regulation. It is possible, however, for consumer losses to be concentrated among a minority, perhaps even one smaller than the group of beneficiaries. Some goods simply have a small number of consumers. In the absence of transaction costs, however, the majority *would* have an interest in avoiding the inefficient rule, insofar as the group that would lose out from the inefficient rule could pay the majority to vote against it, and still come out better off than they otherwise would have. cf Stigler (n 53) 10 n 8.

¹⁰⁹ *ibid* 11-12.

the contrary offers to the individual consumer. But industries also have the advantage that they are already organized into firms (often, a small number of them), a happy circumstance that yields organization costs significantly lower than those available to consumers. That makes it easier for the industry both to rally voters and to try to directly influence legislators.¹¹⁰ Here, the distribution of benefits makes the industry well-represented at the ballot box indeed.

In terms of outcomes, the model could be constructed in reverse, from the perspective of a unitary legislator trying to get a sufficient plurality of votes.¹¹¹ From the perspective of the legislator (or the party activist), the relevant question would be not whether the passage of an industry-supported regulation would be good or bad for society, but whether its expected effect on the vote count would be positive or negative.

C. Rent-Seeking and Collective Action Problems in the Evolution of Judge-Made Law

Shifting interest-based analysis of the legislative process, away from the distribution of interests and onto how those interests are represented, leads to some counterintuitive conclusions. Those conclusions warrant similar reservations about interest-based analysis of the law-making through the courts as well. It turns out that, among the many weaknesses of the early Posnerian accounts of the common law's efficiency, the most critical was the inadequate attention they paid to the relationship between the individual parties to a legal dispute and the groups with a stake in the rules at issue. The most lucid treatment of this dimension was actually written slightly before law and economics took on Posner's efficiency claim. Marc Galanter's 'Why the "Haves" Come out Ahead'¹¹² did not come out of the law-and-economics tradition, but was instead one of the classics of

¹¹⁰ *ibid* 12. Stigler took it for granted that industry was capable of acting together, and left the question of why as an unsolved puzzle to be explained. He referred to Olson's by-product theory, that lobby organizations work because they provide direct benefits to members as well as coordination benefits, as one possible explanation. *ibid* 13 n 11. Olson however had also suggested that the organization of industries into a small number of firms might allow their relatively large group of beneficiaries to act in concert as if they were a much smaller group. Olson (n 93) 142-48.

¹¹¹ See also Peltzman (n 107).

¹¹² Marc Galanter, 'Why the "Haves" Come out Ahead: Speculations on the Limits of Legal Change' (1974) 9 *Law and Soc Rev* 95; on the article's centrality in the law and society canon, see Joel B Grossman and others, 'Do the "Haves" Still Come out Ahead?' (1999) 33 *L & Soc'y Rev* 803; Carroll Seron and others, 'Is There a Canon of Law and Society?' (2013) 9 *Annual Review of Law and Social Science* 287.

the post-Realist American law and society movement.¹¹³ Galanter's conclusions about judicial law-making mirrored Stigler's pessimism about statutes and regulations. This parallel comes as little surprise once we observe the deep structural similarities in Galanter and Stigler's arguments, attributable to a largely shared intellectual provenance. Galanter's paper develops numerous arguments about how litigation can unfairly distribute advantage over time and about how those dynamics might be addressed through legislative and procedural reforms. The part of his analysis that since earned the most attention is concerned with the incentives faced by parties choosing between settling and litigating an individual dispute, and how their likely choices, given those incentives, can gradually shift rules in favour of one group and to the detriment of another.¹¹⁴

Let me put Galanter's argument in his own terms. His model starts by distinguishing the parties to a legal dispute either as one-shotters, who participate in a given type of litigation only a small number of times, or as repeat players, who expect to confront the same kind of dispute multiple times in the future.¹¹⁵ The core of Galanter's argument is the capacity of the parties to 'play for rules' and repeat players' significantly greater incentive to do so. One-shotters, by construction, will be concerned only with how the immediate outcome of the dispute would affect their financial position. Repeat players by contrast will be interested in the effect of the prevailing rule on their long-run interests, and thus will give much greater attention to the impact of a litigated outcome on the relevant rules.¹¹⁶ Repeat players will seek to settle disputes where a litigated outcome risks creating a rule that would increase future costs and to litigate cases likely to create an advantageous precedent (even if the expected direct return of litigating the individual case were negative). The one-shotters will have an incentive to take the settlement offers and, by construction, an interest in pursuing a litigated outcome if no settlement was on offer.¹¹⁷ The cases actually litigated will thus tend to gradually skew rules to the

¹¹³ Galanter was however influenced by Olson's work, which is generally slotted at the intersection of economics and political science, not economics and law. On Olson's influence, see below text to n 121.

¹¹⁴ See eg Grossman and others (n 112) 803–05.

¹¹⁵ Galanter (n 112) 97–98.

¹¹⁶ While Galanter was cognizant of how the prevailing rule would advantage the groups in their interactions more generally, he stressed the impact of the current litigation on the outcome of future disputes, rather than on how the rules would structure the cost consequences of their future behaviour more broadly. See especially *ibid* 98, n 5.

¹¹⁷ Note that the incentives of the parties are not dependent on any differences in their assessed probability of success. Even if the one-shotter is more likely than not to lose a case, they may still have an incentive to

advantage of the repeat players.¹¹⁸ This dynamic, according to Galanter, is why repeat players would ‘come out ahead.’

Galanter may not have been writing within the law-and-economics tradition, but his argument accorded to a high degree with its methods. He generally assumed that parties would act in a calculating, self-interested manner;¹¹⁹ he started by thinking through the implications of a simple model and only then moved on to consider how additional factors complicated the analysis; he drew his key conclusions on the narrow basis of his model parameters rather than from empirical data; he was concerned with explaining outcomes on the basis of the relative positions of actors rather than by reference to differences in their individual characteristics.¹²⁰ These resemblances are unlikely to have been a coincidence. Galanter had been exposed to Olson’s analysis and clearly understood how Olson’s framework could be applied to his own model.¹²¹

These links facilitate a remapping of Galanter’s model using Olson’s coordinates. Though the active players in Galanter’s model are the individual parties to the dispute, Galanter’s conclusions concern the aggregate impact of their interactions on the positions of broader groups, who we might, after Galanter, refer to as ‘haves’ and ‘have-nots.’ Galanter did not intend this dichotomy to correspond to two unitary economic classes—as if insurance companies, landlords, and the state revenue administration were a single group whose stakeholders shared a unified interest universally opposed to injured drivers, tenants and taxpayers.¹²² His point, rather, was that the individual one-shotter was part of a larger group (the have-nots) whose interests, *when it came to the rule in*

pursue litigation, so long as the costs of doing so do not outweigh the expected gains. Even in a dispute that would have no effect on precedent if it were litigated, a risk-neutral defendant that has a 70% chance of winning in a dispute where \$10 million is at stake would be willing to pay out up to \$3 million (plus the saved litigation costs); by the same token, a risk-neutral plaintiff, in the absence of a settlement offer, would be willing to litigate so long so long as their litigation costs were less than \$3 million. This accords roughly with Posner’s argument for why higher stakes increase the likelihood of litigation. Richard A Posner, ‘An Economic Approach to Legal Procedure and Judicial Administration’ (1973) 2 JLS 399, 418–19.

¹¹⁸ Galanter (n 112) 100–03.

¹¹⁹ He did not claim other factors were unimportant, however. He even allowed that other factors might dominate those he had included in his analysis. His goal was to clarify how structural conditions and self-interested behaviour could reinforce material advantages, not to produce a definitive conclusion about how the balance of all factors would ultimately distribute advantage. *ibid* 102–03.

¹²⁰ See especially the contrast he draws between his own approach and one based on the ‘competence’ of the parties. *ibid* 103–04 n 20. On the desire in the economics tradition to avoid arguments that depend on differences in tastes, see George J Stigler and Gary S Becker, ‘De Gustibus Non Est Disputandum’ (1977) 67 *The American Economic Review* 76.

¹²¹ Galanter (n 112) 100 n 14, 145 127.

¹²² These examples are drawn from Galanter’s typology of configurations of repeat players and one-shotters. *ibid* 107–08.

dispute, were largely opposed to those of the group (the haves) of which the repeat player was a member.¹²³ Implicit in Galanter's analysis was that, as a group, the have-nots have an aggregate, long-term interest in the prevailing rule that roughly mirrors the interest of the haves. The interest of the haves would lie in rule changes that created a net gain in future interactions with have-nots, regardless of how those changes might impact on the have-nots; the interest of the have-nots, conversely, in rules that favourably structured their future interactions with the haves.

Though there were many parallels between their approaches, Galanter diverged from the Posnerians most acutely in giving no consideration to efficiency. Yet the efficiency implications of his analysis are clear.¹²⁴ As with the application of the Coasean framework to the legislative context, neither group would have any inherent interest in establishing an efficient rule. Drawing on the conceit of Coasean bargaining as it appeared above in the legislative context, it is possible to imagine a negotiated settlement would, depending on the status quo ante, allow the two groups to move from a less to a more efficient allocation of rights (or of risk, liability, cost avoidance etc) or to retain a more efficient allocation that already exists.¹²⁵ As with the ranchers and farmers from Coase's notorious hypothetical, however, the haves and the have-nots would each be chiefly interested in moving the law to their advantage. Whether the law shifted to one group's advantage or

¹²³ Put differently, the analysis is not about classes in the Marxist sense, but about groups with a specific 'position of advantage.' See *ibid* 103–04.

¹²⁴ Rubin eventually noted Galanter's work on these issues, but dismissed it because Galanter had drawn no explicit conclusions concerning the efficiency implications of legal rules. Rubin, 'Common Law and Statute Law' (n 2) 212. Posner and Landes seem to have been alone among the Coaseans in recognizing the implications of Galanter's model for invisible-hand arguments in favour of efficient common law. William M Landes and Richard A Posner, 'Adjudication as a Private Good' (1979) 8 *J Legal Stud* 235, 280. cf the treatment of Galanter in Priest and Klein (n 66) 28–29.

¹²⁵ Say the current law is inefficient, so that the current allocation of use-rights is suboptimal and the benefits of rearranging the allocation are outweighed by the costs of negotiating them, but that the costs of bargaining for a legal, global reassignment is low enough to render the reallocation a net gain. Conditional on the new rights-holders offering sufficient compensation to the original rights-holders, that change could be done in the context of a legal dispute. The implementation of this settlement would involve funding the litigation costs of the party advocating against the current rule (alternately, or in addition, bribing the party that currently holds the right to do a bad job at litigating) and possibly bribing the plaintiff to continue with the litigation, even if it would not otherwise be in their interest to do so. It is unclear, even if a bargained agreement of this sort were possible, why the groups would not just pay to have the claim dropped and change the law via legislation instead. Though no obvious examples come to mind, it is possible that the costs of making the change through litigation might be lower than using the legislative process. In practice, moreover, funding arrangements of this sort continue to be barred by rules against champerty and maintenance in many jurisdictions. Both of these issues can be integrated into analysis of the broader set of factors that condition the power of groups to shape the legal outcomes that implicate their interests.

the other's, or into an efficient settlement that benefited both, would be determined by the effective power of the two groups.¹²⁶

Galanter's argument thus becomes readable as an analysis of how the structural configuration of the litigation process allocates effective power to the groups whose interests it implicates, and what consequences that allocation has for the distribution of advantage between them. The structure of the litigation process creates a (potential) collective action problem for each group as they seek to establish the collective good entailed by a shift in the law (or its maintenance as-is) that would benefit that group's members. Note that, *as a group*, the have-nots would be uninterested in trading a cash settlement in return for the maintenance of the disadvantageous rule, no matter how that settlement might be distributed among them. As a group, it would be to their mutual advantage to share the costs of paying the isolated one-shotter a windfall to reject the settlement offer whenever continuing with litigation would be expected to create or maintain a rule that favoured them. That transaction would of course be advantageous to the isolated one-shotter as well.

The trouble is that, like individual consumers, individual have-nots face high costs in identifying the moments when an interest of theirs is at stake, high costs to become active in disputes that affect that interest, and a relatively low per-capita interest in the outcome of those disputes.¹²⁷ And because the group is relatively large, it faces all the problems of coordination predicted by Olson's theory. The costs of acting in concert are too high to make doing so worthwhile. The overall result is that the isolated one-shotter, much like the individual consumer at the ballot box, cannot help but be a bad representative of the broader class when choosing how to act during a legal dispute. Because of the long-term interest of the individual repeat player in the outcome of the dispute, by contrast, the haves face no effective collective action problem at all. No doubt, in a world without

¹²⁶ See above, text to nn 88–92.

¹²⁷ To drive this point home, consider the group of have-nots composed of future plaintiffs in personal injury disputes. The individual members of this group do not and cannot know at the time of the current dispute that they will one day have an interest in its outcome, even though their stakes in that outcome may eventually be very large. Indeed, because of how tort law structures behaviour, the outcome of tort cases can make a difference in whether certain injuries happen at all. The costs of 'identifying their own interest' is functionally infinite. If the issue is imagined probabilistically, then have-nots must in essence be identified with the whole population, but the expected impact of the instant case on each member, that is, how the new rule will affect their interest in the event that they encounter a sufficiently similar situation, weighted by the likelihood of that event, becomes negligible. In either framework, the balance of costs and benefit mean that no individual, acting independently, has reason to keep abreast of personal injury disputes in which they are not involved; even less to *become* involved.

transaction costs it would be in the interest of the repeat player to rally the assistance of the other haves, whether that meant convincing them to split the expense (or income forgone) of taking a settlement with the one-shotter so as to avoid litigation of an advantageous rule, or getting them to share in the costs of litigating against a disadvantageous one. Yet it would often be in the repeat player's interest to act to the haves' advantage in any case, even when it was not possible to coordinate with them. In terms of Olson's framework, the repeat player is in the position of the individual who finds that the marginal benefits of procuring a collective good outweigh the individual costs.¹²⁸

Let me close these examinations with a comment on one additional advantage Galanter suggested the haves might enjoy. Galanter's paper explored other factors that might skew the legal rules and their application to the advantage of repeat players.¹²⁹ Many of these arguments rest on an assumption about the parties' relative wealth. Galanter developed the one-shotter/repeat-player dichotomy as a Weberian ideal type, combining a variety of analytically distinct but empirically correlated characteristics. One-shotters are not only small in terms of how often they confront a particular kind of legal dispute but also 'small' in terms of total resources. Not only can repeat players expect to face the same kind of legal dispute repeatedly, they are also resource-rich compared to the amount directly at stake in the instant dispute.¹³⁰ As Galanter admitted, these characteristics are not perfectly correlated.¹³¹ Yet in the majority of configurations in which the interests of haves and have-nots conflict, it seems to be a relevant factor.¹³² Galanter concluded from this correlation that a one-shotter might be more conservative than the repeat player in evaluating the stakes of the instant dispute. They would be willing to settle for a smaller

¹²⁸ Galanter did not stress this aspect, but where repeat players are part of an industry with a small number of firms, they may also be able to coordinate through industry groups to make, settle, and litigate individual legal claims, much as they organize their activity to shape legislated law-making through lobbying. Olson suggested that the small number of firms was factor for the success of the interests they represented: Olson (n 93) 143. There is a deep literature on group litigation by organized industries. Eg Paul M Collins, 'Interest Group Litigation' in *Friends of the Supreme Court: Interest Groups and Judicial Decision Making* (Oxford University Press 2008).

¹²⁹ For example, Galanter addressed ways in which the character and stratification of the legal profession might exacerbate or abate repeat-player advantage, echoing points made by the Coaseans, he underscored that increasing litigation costs favoured existing rules by increasing pressure to settle (Galanter (n 112) 114–19, 121–22.); and he drew attention to the gaps between rules on the books and what actors could get away with, and suggested ways in which repeat players might have the advantage in the degree of 'penetration' of formal rules and in structuring relationships under those rules (ibid 98, 103, 122, 149.)

¹³⁰ Galanter (n 112) 97–98.

¹³¹ ibid 98, 103.

¹³² For evidence, see the taxonomy in ibid 107–08.

amount, and less willing to spend on litigation, than would a richer litigant.¹³³ This effect would combine with another factor favouring repeat-players in litigation: their expectation that similar disputes would arise multiple times allows repeat players to enjoy economies of scale in litigation costs unavailable to one-shotters.¹³⁴ Functionally speaking, then, the 'productivity' of their litigation preparation would likely be greater than that available to the one-shotter, even at the same level of expenditure on the individual dispute.

III. Contingency and Indeterminacy in the Evolution of Laws

What can be concluded in the aggregate from this comparison of Galanter and Stigler's seminal articles? To summarize, the parallels in the structure of their arguments cut directly against the suggestion, made by the early interpreters of Posner and by Stigler, that any mode of law-making has an inherent tendency to move toward or away from some standard of efficiency. Once the Posnerians turned to the questions Galanter had raised, they were quick to reconsider their claims as well.

The selective litigation models had failed to account for the collective action problem entailed by a system where universally applicable laws were determined through individual disputes. They had essentially equated the *parties'* relative stakes in a dispute with the distribution of costs between the *classes* of economic actors whose interactions would be structured by the rule at issue.¹³⁵ As put by Cooter and Rubinfeld, selective

¹³³ *ibid* 99–100. To translate the point into economics terminology, Galanter seems to have been getting at the idea that risk aversion might be wealth-relative, so that, for a fixed estimate of the direct amount at stake, the one-shotter could be treated as risk-averse and the repeat player as risk-neutral. There is some empirical evidence that risk attitudes are in fact wealth-relative. Luigi Guiso and Monica Paiella, 'Risk Aversion, Wealth, and Background Risk' (2008) 6 *Journal of the European Economic Association* 1109.

¹³⁴ Galanter (n 112) 98, 114.

¹³⁵ Priest not only assumed that the parties to a dispute faced symmetrical stakes in an adjudicated outcome, but also equated the stakes of the dispute for those parties with the joint costs for all actors subject to the rule at play in the dispute. Priest (n 63) 66–67. Rubin's distinction between 'parties interested in precedent' and 'parties not interested in precedent' maps roughly onto Galanter's typology of one-shotters and repeat-players. Though he did not emphasize the point in his introduction, his conclusion that the common law *could* tend toward efficiency was limited to his 'Case A', that is, to areas dominated by disputes between two parties with an interest in precedent. Rubin, 'Why is the Common Law Efficient' (n 65) 53–57. *Pace* Rubin however, the relevant issue, as made clear by Galanter's analysis, is how well the parties to the dispute represent the groups with an interest in the underlying rule, not just how the rule will affect the net costs of the parties themselves. cf Hadfield, who suggested that, beyond these structural factors, disputes would actually tend to be triggered by a party who was a bad representative of the broader class. Gillian K Hadfield, 'Bias in the Evolution of Legal Rules Symposium: Positive Political Theory and Public Law' (1992) 80 *Geo L J* 583. Cooter and Kornhauser's critique and analysis of the first-generation 'efficient common law' arguments likewise addressed the question of whether inefficient rules would be

litigation creates a confrontation between distribution and efficiency. Individual litigants will ultimately be more concerned with capturing the returns from a favourable ruling than with the costs such a ruling might impose on society as a whole.¹³⁶ The Posnerian litigation expenditure models fared no better. They too depended on the existence of a neat mapping between the distribution of private costs a court decision would impose on the parties to a dispute and the distribution of social losses occasioned by that ruling.¹³⁷ much in line with Galanter's inferences, the structure of their arguments once this assumption was relaxed suggested, that the effect of litigation expenditures on rule-making would again tend to favour the groups whose interests were well-represented in litigation, a tendency that could favour efficient allocations of resources—or not.¹³⁸

In the law-and-economics community, these and other failures soon reshaped thinking not only about judge-made law, but about the trajectory of law more generally. Let me deal with these two aspects in turn. First, stuck between a commitment to invisible-hand explanations and faith in the efficiency of the common law, backers of Posner's original thesis about the common law's efficiency split.¹³⁹ Though Posner ultimately conceded that inefficient rules could easily survive the churn of an unguided litigation process,¹⁴⁰ he cleaved to his original thesis by doubling down on the role of reason and insight in determining judicial output,¹⁴¹ a position substantively adopted by a number of his colleagues.¹⁴² Other scholars, however, including those who had mooted the earlier 'evolutionary' theories, largely abandoned the hypothesis of the common law's efficiency, though many retained the project of developing invisible-hand, and explicitly evolutionary, explanations of trends in precedent.¹⁴³

more likely to be litigated without distinguishing the parties to the dispute from the actors subject to the rule. Cooter and Kornhauser (n 62) 150–56.

¹³⁶ Robert D Cooter and Daniel L Rubinfeld, 'Trial Courts: An Economic Perspective' (1990) 24 *Law & Soc'y Rev* 533, 1092–93.

¹³⁷ Goodman, to his credit, made this limitation on his original argument explicit. Goodman (n 64) 395, 398.

¹³⁸ Cooter and Kornhauser (n 62) 156.

¹³⁹ See Rubin, 'Common Law and Statute Law' (n 2) 205–06.

¹⁴⁰ Using an extension of Rubin's model, Landes and Posner found that while efficient rules might become more so over time, inefficient rules would often 'lie dormant.' Landes and Posner (n 124) 272, 279.

¹⁴¹ See eg Posner, 'Some Uses and Abuses of Economics in Law' (n 55) 294–95; see Hadfield (n 135) 583–84.

¹⁴² 'Our view is, so far as common law tends toward efficiency, it must be driven by the ideas of judges, not by competitive pressures in the market for litigation.' Robert D Cooter and Daniel L Rubinfeld, 'Economic Analysis of Legal Disputes and Their Resolution' (1989) 27 *Journal of Economic Literature* 1067, 1093.

¹⁴³ Rubin, who developed the first 'evolutionary' model to explain the efficiency hypothesis, has concluded that these models 'failed' in their explanatory ambition. Paul H Rubin, 'Micro and Macro Legal Efficiency: Supply and Demand' (2005) 13 *Sup Ct Econ Rev* 19, 21. One notable holdout, whose conclusions appear to be based on an uncritical and selective reading of the earliest literature, is Jeffrey E Stake, 'Evolution of

Second, as for the trajectory of law more broadly, many of the erstwhile Posnerians came to acknowledge the parallels between Stigler's critique of legislation and Galanter's account of how interests shape litigation outcomes.¹⁴⁴ Rubin, for example, developed an informal model that tied the efficiency of a given body of law (whether produced through litigation or legislation) to the 'costs of organizing interests groups.'¹⁴⁵ Patterns in the relative efficiency of bodies of law were thus explainable by reference to the time they were created, under the assumption of a gradually improving technology of collective action.¹⁴⁶ Oddly, however, the premise that efficiency-bias is greater in judicial law-making than in legislative law-making has demonstrated remarkable staying power,¹⁴⁷ enjoying something of a second life in discussions of the purported advantages of common law over civil law systems.¹⁴⁸ The law-and-economics community has continued to generate literature trying to model the conditions under which judge made law will, in fact, be more efficient than legislation.

So, are the norms produced through litigation more efficient than democratic legislation? One way to evaluate the hypothesis might be to line up the literature on each side of the debate, eliminate claims based on obvious logical errors, cancel out parameters that

Rules in a Common Law System: Differential Litigation of the Fee Tail and Other Perpetuities' (2005) 32 Fla St U L Rev 25. On continued efforts to account for the content of case law using invisible-hand explanations, see R Peter Terrebonne, 'A Strictly Evolutionary Model of Common Law' (1981) 10 JLS 397; Rubin, 'Common Law and Statute Law' (n 2); Cooter and Rubinfeld (n 142) 1091-93; Nicola Gennaioli and Andrei Shleifer, 'The Evolution of Common Law' (2007) 115 Journal of Political Economy 43.

¹⁴⁴ Hirshleifer seems to be the first to make an explicit that the pathologies which attend 'contests of strength' can occur in any law-making arena: Jack Hirshleifer, 'Evolutionary Models in Economics and Law: Cooperation Versus Conflict Strategies' (1982) 4 Research in Law and Economics 1, 46-49. Rubin had hinted at but did not develop these parallels in his first model. Rubin, 'Why is the Common Law Efficient' (n 65) 61.

¹⁴⁵ Rubin, 'Common Law and Statute Law' (n 2). This 'technology of collective action' model drew directly from Olson, and especially on Hirshleifer (n 144).

¹⁴⁶ Rubin's high-level conclusions do not quite match his analysis. In the body of the paper, he frames the central issue in terms of how well the social interests on each side of an issue are represented in the law-making process, however conducted. In his introduction and conclusion, he seems to suggest that relative inefficiency is a matter of whether law-making activities are dominated by individuals or by groups. Rubin, 'Common Law and Statute Law' (n 2) 222.

¹⁴⁷ Hadfield (n 135). Often, this scholarship has rejected the claim that common law tends toward absolute efficiency, instead mooted the position that litigation can shift precedent *toward* efficiency, and specifically, move it 'closer' to efficiency than would statutory rule-making. See eg Gennaioli and Shleifer (n 143); Giacomo AM Ponzetto and Patricio A Fernandez, 'Case Law versus Statute Law: An Evolutionary Comparison' (2008) 37 JLS 379. For the earliest model of the efficiency-bias of a continually-shifting body of law (albeit one expressing scepticism about whether the necessary mechanisms were realized in the real world), see Cooter and Kornhauser (n 62).

¹⁴⁸ Eg Paul G Mahoney, 'The Common Law and Economic Growth: Hayek Might Be Right' (2001) 30 J Legal Stud 503; Edward L Glaeser and Andrei Shleifer, 'Legal Origins' (2002) 117 The Quarterly Journal of Economics 1193; Ponzetto and Fernandez (n 147). Debates about the relative superiority of the common law over the civil law are an important theme in Chapter 5 below.

conflict with real-world behaviours, and grant victory to whatever reasons are left standing.

The very bulk and indeterminacy of the literature, however, provides crucial evidence of the correct answer. The diversity of claims does not illustrate which side is most favoured in the broader debate but instead shows the degree to which answers turn on the specifications of the underlying models. Galanter and Stigler both made visible, in their own way, that it is not the type of law-making that determines the direction of legal change, nor the identity of the participants, but how well the participants, acting through a specific process, represent the broader interests at stake. Nothing since published in law and economics has refuted that fundamental observation.¹⁴⁹ Instead, the literature can best be understood as, first, an exploration of the factors shaping the effective representation of interests within various law-making processes and, second, as a speculation about the importance of those factors in shaping the trends in particular legal regimes or areas of law. Hadfield, for example, addressed the consequences of general rules being applied to a diversity of particular situations and interactions. By modelling the diverse consequences of a rule on the distribution of costs, and the attendant shifts of activity in interactions where the rule is implicated, she predicted that precedent would move toward efficiency only by chance, even if judges were *trying* to maximize aggregate welfare.¹⁵⁰ Even without strategic behaviour on either side, the particular litigants that turned up at court to challenge a rule would always be bad representatives of the larger class of actors affected by the rule.¹⁵¹ Studies modelling the case law system have considered the complications introduced by the participation of lawyers¹⁵² and by the

¹⁴⁹ Admittedly, some scholarship has come to contrary conclusions by ignoring these questions. Ponzetto and Fernandez, for example, build a stochastic model of legal change that suggests judicial law-making will gradually converge toward whatever rule judges prefer, on average, while legislative norms bounce around near the 'legislature's preference.' Placing this stochastic model atop a micro-behavioural model in which average judicial rule-preferences and the 'legislature's preference' both centre on the efficient rule, however constructed, yields their conclusion that case law tends toward efficiency, while legislation does not. Their behavioural premises, however, account neither for the biases that Galanter suggested would be introduced by selective litigation, nor for the structural factors that shape the formation of interest groups in the legislative process. While they model the effect of interest groups on the legislative process and on the selection of judges, they assume that these interest groups, on average, represent an unbiased sample from the preferences of the population. Ponzetto and Fernandez (n 147).

¹⁵⁰ The crux of her argument is that the parties who challenge a rule will generally be parties for whom the rule works least well. Hadfield (n 135).

¹⁵¹ Hadfield suggested that the inclusion of strategic behaviour would exacerbate dynamics in her model, but not fundamentally alter them. *ibid* 590, n 29.

¹⁵² See eg Paul H Rubin and Martin J Bailey, 'The Role of Lawyers in Changing the Law' (1994) 23 JLS 807; Frank B Cross, 'The Role of Lawyers in Positive Theories of Doctrinal Evolution' (1996) 45 Emory LJ 523. Rubin and Bailey developed and empirically test a model of lawyer-driven change in products liability law

structure of the courts;¹⁵³ they have modified earlier approaches to account for the specific incentives faced by judges,¹⁵⁴ and to integrate attention to how precedent functions in one type of legal system or another.¹⁵⁵ Crew and Twight analysed the possible consequences where government officials can manipulate organization costs (transaction costs) that shape the ability of interest groups to pursue their interests.¹⁵⁶

The upshot of this perspective is clear. Beyond any strict distinction between judge-made law and statute—or, more brazenly, between common law and civil law traditions—the relative efficiency of a particular area of law, or even of a particular doctrine, will turn on a combination of factors. The relative size of the groups whose interests are at stake, the shifting costs of coordinating in pursuit of collective goods both in general and for particular interests, the aggregation and weighing of interests by law-making institutions, including the institutional incentives of law-makers—each of these factors might make a decisive difference to the overall outcome. Small differences in these factors can make the difference between the conclusion that doctrines of judge-made contract law will tend toward efficiency today and the conclusions that the promotion of efficiency in contract law was limited to a mode of precedential reasoning that disappeared in the eighteenth century.¹⁵⁷ Whether the law-making trends are dominated by efficiency- or rent-seeking changes, or by random drift is ultimately *contingent* on a large number of small factors.¹⁵⁸ The devil is in the details.

in the United States. Cross critiqued their model and offered a larger battery of empirical tests that did not accord with their hypothesis.

¹⁵³ Lewis A Kornhauser, 'Modeling Collegial Courts I: Path-Dependence' (1992) 12 *International Review of Law and Economics* 169; Michael A Crew and Charlotte Twight, 'On the Efficiency of Law: A Public Choice Perspective' (1990) 66 *Public Choice* 15, 26.

¹⁵⁴ Landes and Posner (n 56); Todd J Zywicki, 'The Rise and Fall of Efficiency in the Common Law: A Supply-Side Analysis' (2002–03) 97 *Nw U L Rev* 1551. See also Georg Von Wangenheim, 'The Evolution of Judge-Made Law' (1993) 13 *Int'l Rev L & Econ* 381.

¹⁵⁵ Landes and Posner (n 124); Zywicki (n 154). See also Vincy Fon and others, 'Litigation, Judicial Path-Dependence, and Legal Change' (2005) 20 *Eur J Law Econ* 43.

¹⁵⁶ While they noted that judges could radically restructure the constraints on law-making, especially via adjudication on constitutional questions, they studied the incentives for and consequences of 'transaction-cost manipulation,' ie 'when government officials restructure the transaction costs that constrain the revision of government authority.' Crew and Twight (n 153) 21–22.

¹⁵⁷ Compare *ibid* 26; Zywicki (n 154) 1566–67.

¹⁵⁸ Rubin concluded that where the population of disputes is dominated by parties with no long-term interest in precedent, the result will be unstructured movement between various configurations of a rule. Rubin, 'Why is the Common Law Efficient' (n 65) 56–57.

IV. Path Dependency in the Evolution of Laws

The more recent studies in the Posnerian tradition have also foregrounded a key set of issues, without which any discussion of legal *evolution* is an overreach. In particular, these studies have closely considered the actual dynamics of change, an issue which Galanter, Stigler, and the early Posnerians had all given only passing attention. Only attention to the diachronic can distinguish an explanation of law's nature (or function) from an explanation of its past (or prediction of its future) trajectory. More recent studies have turned to this dimension in earnest, and come to very different conclusions as a result.

Though Galanter did not expressly mention evolution, his account sought to develop not only an explanation of law, but an explanation of legal change over time that emphasized the iterative, gradual unfolding of the law-making process. Because the adjudication of individual cases will seldom result in a radical shift in legal norms, his argument depended on the repeated litigation of an issue by similarly situated parties. Stigler's account, by contrast, completely ignored time as a salient factor. Rather than a series of law-making decisions, Stigler modelled individual regulatory norms as if they were the outcome of a single, one-off interaction between policy-makers and powerful interest groups. He turned his mind to how pre-existing institutional structures channelled forces for change, and characterized the result as an emergent effect of forces acting in that context. In accordance with his overarching market metaphor, the result framed prevailing law as something like an equilibrium between forces pushing law in countervailing directions.¹⁵⁹ It would not take much additional analysis of the indeterminacy of legislative coalitions,¹⁶⁰ the interest of political entrepreneurs in ensuring funders never have their wishes fully satisfied,¹⁶¹ or the stochastic dimension of

¹⁵⁹ Stigler identified a number of second-order effects, and prevailing institutional protections that created a drag on industry rent-seeking. More importantly, he suggested that mounting losses for those disadvantaged by a policy would eventually shift the cost-benefit calculations for voters to act and organize against it. Essentially, industry could only get away with taking so much of the cake. Peltzman offers a clear mathematical formalization of this point. Stigler (n 53) 6–7, 12; Peltzman (n 107) 214–17.

¹⁶⁰ Peltzman's formalization of Stigler's model showed that Stigler's outcome depended only on the size of the winning and losing groups, not their particular interests or characteristics, but also that a vote-maximizing legislator would be likely to include compensation for *some* of the losers. Peltzman (n 107) 213–21.

¹⁶¹ Lawrence Lessig, *Republic, Lost: How Money Corrupts Congress—and a Plan to Stop It* (1st edn, Twelve 2011) 196–99.

actual political outcomes¹⁶² to transform Stigler's model into an account of gradual, piecemeal movement of legislation away from the public good and toward the benefit of special interests.

Yet Stigler and Galanter represent only two of the possibilities that result when dynamics are put front and centre. Galanter modelled a process that would move in one direction without limit, regardless of its starting point. Stigler, by contrast, though he did not integrate careful attention to time into his account, presented a system stabilized at the equilibrium between opposing forces—like a falling object reaching terminal velocity or a balance that squares two weights. The unbounded trend (Galanter) and the slide toward a prefigured extremum (Stigler) are only two of the shapes that a dynamic system might trace. Because they were focused on an individual law-making decision, those other possibilities were given no consideration in the early Posnerian accounts of judicial law-making, either.

Once the Posnerians began developing models to account for the diachronic dimension, they discerned a much larger repertoire of possible forms that could be traced out by law's path of change over time. Cooter and Kornhauser, accepting for the sake of argument that inefficient laws would have a higher likelihood of being litigated, showed that law could endlessly move between various configurations, settling on no final resting point but instead inscribing a long term pattern of intermittent periods spent among those possibilities.¹⁶³ They concluded that the processes depicted by the earlier models might produce a legal expectation relatively more efficient than an initial rule, but could not permanently fix precedent on the most efficient rule.

Cooter and Kornhauser's model still predicted a relatively stable and determinate output, just realized at a higher level of abstraction. Even without modelling the details of the system's long-term behaviour, Landes and Posner showed with a rather straightforward extension of Rubin's model that a simple account of precedent's role in litigation could lead case law toward or away from efficiency, depending on the bias in the corpus of previously decided cases.¹⁶⁴ Priest suggested that the trajectory would depend not on

¹⁶² Ponzetto and Fernandez model the long-term state of the law produced through the legislative process as an outcome that results from pressure exercised by varied interest groups whose influence in any particular period is probabilistic rather than certain. Ponzetto and Fernandez (n 147) 394–97.

¹⁶³ Cooter and Kornhauser (n 62).

¹⁶⁴ Landes and Posner (n 124) 273–74, 275–77, 281–84. See also Von Wangenheim (n 154).

whether the prior jurisprudence favoured one position or the other, but on the level of division and disagreement this jurisprudence expressed.¹⁶⁵ By taking into account countervailing judicial interests, in creating innovative precedents on the one hand and falling line with their colleagues' decisions on the other, Wangenheim provided a simple model of how case law might not only exhibit cyclical behaviour, but could move chaotically in ways not capturable by any deterministic mathematical model.¹⁶⁶ It seems the invisible hand in law-making belongs not only to a capricious spirit, but to an unreliable one as well. It is not just that small differences in structural parameters can make a large difference to the outcome; the 'outcome' may depend on historical circumstances, and be no more than a temporary local orbit in a much larger, unpredictable itinerary.

V. Conclusion

From the perspective of those who first set out to vindicate Posner's vision of a common law shaped by an invisible hand that would, much like the market, allocate resources to their most efficient use, the analysis in this chapter definitively routs their ambition. If the underlying vision of law is adequate, however, what can be salvaged from the Posnerian tradition is the broad claim that the long-term state of norms emerges from the continuous action of diverse forces, rather than from a centralized design or unified purpose. That conclusion applies regardless of the form of law-making that contributed most to a given rule, regime, or doctrine.

On the other hand, the critique works toward a reconstruction of a unified, Coasean (or Coase–Olsonian) analytic of legal change. This reconstruction tenders an ostensibly powerful toolkit to understand the causal factors that shape trends in the law. So long as it does not turn out to suffer from some fundamental flaw in its characterization of law or of law's relation to social action, that toolkit promises penetrating insights. Wielded prudently, by focusing on particular coordination problems or narrow legal problems, it could predict whether legal developments amended through a particular process

¹⁶⁵ Priest, having retreated from his identification of the stakes for the parties with the overall cost consequences of the dispute (see above, n 135), emphasized that the disputes selected for litigation would likely be biased towards situations in which the parties differed significantly in their subjective probability judgements about success at trial. George L Priest, 'Selective Characteristics of Litigation' (1980) 9 J Legal Stud 399.

¹⁶⁶ Von Wangenheim (n 154).

involving particular modes of representing relevant interests are likely to promote efficiency, favour the narrow interests of one kind of actor, or otherwise. There is more. So long as there are no fundamental gaps in the reconstructed vision of law and its economic-political context, this reconstruction indicates a pathway to developing a normative analysis of the form that law-making should take when confronting an adequately defined and delimited legal issue.¹⁶⁷

The model, now afforded its maximum strength, also provides the seed for the analysis in the remainder of the dissertation.

At least in its ambitions, the Coasean approach meets the criteria of an evolutionary theory of legal change set out in Chapter 1. It offers a model of legal change in which norms emerge from the iterative interaction of diverse causal factors, attends to the mechanisms through which those factors are aggregated, and flows out of a clear commitment to positivist theorizing. However, the approach may under closer scrutiny turn out to be an inadequate evolutionary theory, especially when it comes to its generality and empirical validity. Even in this generalized form, it is hard to see how a model based in pecuniary interests could be applied to litigations between individuals and the state.¹⁶⁸ There is moreover a real possibility that the factors emphasized by the model are less than definitive—even relatively unimportant. As Galanter pointed out in his classic text, understanding how self-interest and strategic behaviour might impinge on legal change is independent of how large those effects are compared to other factors.¹⁶⁹ It may be that the model requires a richer account of the motivations that drive behaviour under law. The Coasean approach draws on a thin, neoclassical approach to legal normativity that treats law's relevance for behaviour as a price or cost.¹⁷⁰ In effect, it imagines that norms affect behaviour only via the threat or promise that their enforcement will increase or decrease the expected return of engaging in a regulated activity. As has been emphasized in a now-rich body of literature, norms may also

¹⁶⁷ cf Hadfield's work on legal system design and the institutional determinants of the 'quality of law.' Gillian K Hadfield, 'The Levers of Legal Design: Institutional Determinants of the Quality of Law' (2008) 36 *Journal of Comparative Economics* 43.

¹⁶⁸ Priest (n 165) 404 n 23; Galanter (n 112) 111–12. cf Hadfield, who notes that the Coasean analysis is ill-suited to litigation under statute. Hadfield (n 135) 586.

¹⁶⁹ Galanter (n 112) 102–03.

¹⁷⁰ Lewis A Kornhauser, 'The New Economic Analysis of Law: Legal Rules as Incentives' in Nicholas Mercurio (ed), *Law and Economics* (Kluwer Academic 1989) 35.

function more directly, as reasons for action.¹⁷¹ Self-interest may not be quite as important as these models make it out to be.¹⁷²

Despite these limitations and caveats, my intuition is that, in the absence of a more fundamental defect, the Coasean approach could be salvaged through a combination of supplements, expansions, and substitutions. More strongly, I doubt it is possible to understand the dynamics of change in legal rules in the modern era without giving some attention to the kind of selfish material ends that law and economics has traditionally turned on. Nonetheless, we might subtly discern, lying behind the Coasean approach, a more general account in which normative preferences, institutional constraint, and legally-structured behaviour work together to transform laws over time.

The Coasean approach serves well as a starting point for the explorations in the remainder of the dissertation, in part because it serves as a credible proxy for this inchoate evolutionary approach to-be, but above all because it presents a powerful analytical frame in which knowledge is not a salient factor. It therefore stands as a candidate for an evolutionary theory of legal change. Knowledge is of course present in multiple elements of the model. The approach assumes that economic actors a) know their own preferences and the preferences of others, b) that they have shared opinions regarding how political institutions will channel their lobbying or litigation strategies, and c) that they have a shared understanding of how law adds or subtracts to the advantages of engaging in certain behaviour. But again, there seems to be nothing to gain from rephrasing the model's matters-of-fact in epistemic terms. The actors have interests and behaviours, the law shapes their incentives, they act strategically under constraint, and changes to the law emerge as a result. It is not obvious what would be gained by also saying that the actors *know* these things.

In the next chapter, however, I find that the Coasean approach *is* dogged by a more fundamental defect. Attending to some questions raised by evolutionary theory makes it

¹⁷¹ See e.g. *ibid* 42–49. McAdams, in offering an alternative account of the relation between law and behaviour, roughly divides the preexisting literature on obedience to the law between the approach favoured in the economic analysis of law, emphasizing how 'law coerces,' and a more sociological approach interested in how 'law persuades.' Richard McAdams, 'The Expressive Power of Adjudication' (2005) 2005 U Ill L Rev 1043, 1045.

¹⁷² Shavell has considered the possibility that actors choosing how to respond to a norm, might be motivated in part by a desire to advance the social good or promote social welfare. Steven Shavell, 'When Is Compliance with the Law Socially Desirable?' (2012) 41 JLS 1.

much harder to ignore the relation between actions, preferences, and laws—and what people think and believe about those categories.

3 — A Problem of Contested Knowledge in Coasean Approaches to Legal Change

*The reasoning employed by the courts in determining legal rights
will often seem strange to an economist because many of the
factors on which the decision turns are, to an economist,
irrelevant.*
—Ron Coase (1960)¹

This chapter develops a number of ideas, concepts, and critiques that legal scholars have adapted from evolutionary theory, and deploys the resulting theoretical repertoire to expose the limits of the Coasean paradigm of legal evolution. The result of those investigations will be a clear articulation of the ways that the knowledge claims of economic actors enter as a salient factor into the processes that determine the path and structure of legal change.

Many champions of legal evolution are committed to the premise that developing an evolutionary account of legal change requires an adaptation of ideas and concepts from evolutionary theory writ large. Structurally, this chapter is staged as an investigation into what such concepts can add to or reveal about accounts that, in their ambitions, otherwise meet the usual criteria of being ‘evolutionary.’ In Part I, I explore a number of concepts that have been central to arguments borrowed from evolutionary theory by legal scholars: adaptation, the Darwinian algorithm of variation, selection, and inheritance, genetic inertia, units of selection, and replicators and interactors. My analysis does not simply ‘put these ideas on the table,’ but explores their relationships, reviews their prior use in legal scholarship, and generates a typology of theories that are distinguished by their explanatory reach and by the elements they must contain. The goal is to sand off the rough edges of these concepts, sharpen their critical thrust, and improve their capacity to appraise, strengthen, or reveal fatal flaws in existing accounts of legal change.

¹ RH Coase, ‘The Problem of Social Cost’ (1960) 3 JL & Econ 1.

The chapter's key contribution to the overall argument of the dissertation, however, lies in Part III, which returns to the Coasean approaches to legal change reviewed in the last chapter. The upshot of the argument is that the heterogeneity of actors, activities, and events to which rules may apply creates a problem of shared knowledge regarding the scope and extent of application of any given legal norm. Because actors are self-interested, however, disagreements over these semantic or epistemic questions will require their own mode of dispute resolution. These questions are in fact answered, for the most part, through the legal system itself, but they are also *necessarily* dealt with through the legal system. The consequence for models of legal change, however, is to throw a cloud of suspicion over any account that fails to attend to the transformation of legal form. To formalize this argument, Part II provides a close reading of an exemplary contribution to the Coasean paradigm, written by William Landes and Richard Posner.

As I relate in the conclusions (Part IV), this argument stands on its own. Neither its validity, nor its salience for the Coasean paradigm ultimately depend on the evolutionary concepts that I elaborate in Part I. Nonetheless, the structure of the chapter clearly documents how the argument was developed, and including the conceptual background is an important part of showing the intellectual inspirations by which the argument developed. More broadly, the arc of the analysis in this chapter demonstrates the critical intervention that evolutionary theory can make in efforts to understand legal change. As I stress, processes of legal change may not in the end be mappable using the repertoire of evolutionary biology. But this chapter shows that evolutionary theory certainly can generate critical questions about those processes.

I. Adaptationism, the Darwinian Algorithm, and Evolutionary Theory: Some Conceptual Groundwork

Within the broad variety of evolutionary accounts of legal change identifiable by arguments rooted in mechanisms and emergence, is a narrower type that specifically draws by analogy from modern evolutionary theory. In this part, I compare, contrast, and critique a number of concepts that have been deployed by legal scholars who have been both supportive and sceptical of the project to assimilate legal change to a perspective inspired by Darwinian natural selection.

One key conclusion of this part is that efforts to develop evolutionary theories of legal change will fall into one of three categories. First, they may model change in accordance with a ‘classical view’ of natural selection. If a set of entities which is reproduced over time is subject to inter-generational variation, selective reproduction on the basis of those variations, and inheritance of those variations between generations, then the population will tend to develop in a way that increases the prevalence of those variants. An evolutionary account of legal change in this sense will require only a description of the mechanisms of variation, selection, and inheritance.

Second, they may imagine legal change as a Darwinian process that much more closely tracks biotic evolution. The key complication of biotic evolution is the *self*-replication of life. This wrinkle adds significant complexity both to the number of entities and processes that need to be identified, and whose relationships need accounting for. Yet the more complex view offers a possible way to frame the genetic inertia, that is, the relative stability, of legal norms.

The third possibility of course is that an adequate evolutionary account might be developed without any substantive parallels to natural selection.

The other key conclusion of this part concerns adaptation. Critical commentary by Robert Gordon and others long ago suggested that any account of legal change that leads to a prediction that law is adaptive, or ‘functional,’ will almost certainly be wrong. Certainly, one advantage of the biological parallel is its explanation of why adaptation will only ever be partial and constrained.

A. The Darwinian Algorithm

Among those working to develop theories of legal change, the most conspicuous borrowing from evolutionary theory is the so-called ‘Darwinian algorithm’ of variation, selection, and inheritance.² The logic of the algorithm is simple. A population of entities is reproduced over time. The population is subject to a process that causes variations in characteristics of some individuals in that population. Reproduction is selective: not all individuals reproduce. The variable characteristics affect the relative reproductive success of individuals. Last but not least, the characteristics that affect reproductive

² For the complexities and challenges of borrowing from evolutionary theory and a short introduction to the Darwinian algorithm, see Chapter 1, Part IV.

success can be inherited by future individuals in the population. The logic is then that success-supporting characteristics will become more prevalent across the population.

Today, the most well-known interpretation of Darwin's theory is likely the account in Richard Dawkins' 1977 book, *The Selfish Gene*. Dawkins did not explicitly draw on the Darwinian algorithm, but it is not difficult to fit it to his account of evolution. The mechanism of retention is the self-replicating power of the DNA molecule;³ variations are introduced through various forms of genetic mutation;⁴ and the mechanism of selection operates through competition, or 'the struggle for existence,' among *alleles*, genes with similar locations on the genetic code.⁵ Naturally, the story is more complicated than mere competition between DNA molecules.⁶ Nonetheless, according to Dawkins, '[t]he same old processes of automatic selection between rival molecules by reason of their longevity, fecundity, and copying-fidelity, still go on as blindly and as inevitably as they did in the far-off days.'⁷

The algorithm is not a magic formula however. There is a tendency to believe having located three elements that look like 'variation,' 'selection' and 'reproduction' in an ongoing process of transformation, that the explanatory payoff will come about automatically. As it turns out, the capacity of the schema to shed light on processes of change depends both on its integration into more complex theory and in careful choice about how its elements are articulated.

B. Adaptationism and Natural Selection

Before saying more about the pitfalls one can fall into when trying to characterize a process in terms of the operation of the Darwinian algorithm, I need to address another concept. In a now-seminal contribution to legal historiography, Robert Gordon gave consideration and extended critique of a concept he called 'evolutionary functionalism.'⁸ Gordon's paper was an attempt to summarize, validate, and extend a set of critiques that had previously been directed at a tacit view of 'law-in-history' that was and continues to

³ 'DNA molecules ... replicate, that is to say they make copies of themselves ... the DNA molecules are now very good at it indeed.' Richard Dawkins, *The Selfish Gene* (1st edn, Oxford University Press 1976) 24.

⁴ *ibid* 32-33.

⁵ *ibid* 20-21, 25.

⁶ The most important addition to this narrative may be sexual reproduction, which not only supplements, but also significantly complicates all three mechanisms of variation and selection. *ibid* 28-32.

⁷ *ibid* 25.

⁸ Robert W Gordon, 'Critical Legal Histories' (1984) 36 *Stan L Rev* 57.

be preponderant among American legal scholars and jurists more generally.⁹ In its most common incarnation, that view explains prevailing legal forms, or even a society's entire legal system, as a necessary response to the demands of modern society, achieved through an adaptive process.¹⁰

Gordon's concept is a broad tent that offers a vague ideal type rather than precise criteria that would clearly distinguish functionalist from non-functionalist accounts of the nature of law and legal change. Buried within his article, however, is a more expansive but more precisely articulated definition of 'functionalism:'

I'm reserving the term 'functionalism' for the ... type of explanation ... that first posits a set of 'primary,' more-or-less objective needs or dynamic processes and then explains 'secondary' historical phenomena as responses to those needs or processes.¹¹

The aspect of 'evolutionary functionalism' Gordon was most sceptical of was thus not the treatment of social needs as *explanans*, but the much more common relegation of law solely to the role of *explicandum*.¹² The broader type of functionalism he was attempting to dispel, in other words, encompassed all explanations that framed current legal rules or practices as a function of some factor or factors exterior to law, as in the mathematical form $y = f(x)$, which defines y as a function of x . Gordon specifically identified both Stigler's model of legislation and Posnerian accounts of efficient judge-made law, along with at least one strain of Marxist legal historiography, as straight applications of functionalism in this broad sense, albeit with interests rather than social needs serving as the primary independent variable.¹³

The confusions that weigh down even a solitary scholar's use of 'functionalism' vividly illustrate the semantic traps of leaning on contested terms. Gordon originally developed a critique of this conception of functionalism in an earlier paper, using the term adaptationism,¹⁴ and for a number of reasons I will adopt Gordon's initial usage in what follows.

⁹ *ibid* 57–58.

¹⁰ *ibid* 63–65.

¹¹ *ibid* 61, n 11.

¹² Gordon's article is more of a historiographical critique than an attempt at analytical philosophy, so it leaves it unclear whether this social functionalism, that is to say functionalism driven by the response to social needs, is the concept he intends to be identified with 'evolutionary functionalism.'

¹³ Gordon (n 8) 65, 69, 71–75.

¹⁴ Robert W Gordon, 'Historicism in Legal Scholarship' (1981) 90 *Yale LJ* 1017, 1028–36.

In an often-cited article on evolutionary jurisprudence, MBW Sinclair argued that an account of legal change does not count as 'evolutionary' unless it includes a description of each of the three mechanisms in the Darwinian algorithm. The target of his critiques was a class of theories that lack an account of retention. He believed that such theories, properly called, are 'not evolutionary, but merely adaptationist,'¹⁵ expressly adopting Gordon's sense of adaptationism.

Sinclair's effort to identify adaptationism as a failure of proper 'evolutionary' analysis is not a perfect fit with Gordon's. Selection and variation acting together may comprise an adaptive process, but they are neither necessary nor sufficient elements of one. A rule that is deliberately designed to be efficient in a given institutional, economic, or political context can be described as adaptive or responsive to that context just as easily as a rule produced through a series of fortuitous accidents. Recalling the conceit introduced in Chapter 1, of water poured into a cup taking the shape of a cup, it might be said that 'the water has adapted to its environment,' or 'the shape of the water is now a function of the shape of the cup.' Yet speaking of that relation in terms of selection and variation would needlessly confuse the matter. It likewise stretches the intended meaning too far to describe deliberately designed rules as the product of selection and variation. Selection and variation mechanisms acting together are not by themselves sufficient to produce an adaptive process, either. Selection pressures may not be strong enough to have a meaningful impact on the nature of the variants produced over time. The variants generated may be deviant from the perspective of prevailing selection pressures. A mismatch between the variation mechanism and the selection mechanism could just as easily lead to the extermination of a population as a good fit between the two mechanisms could lead to a change in the dominant variant.

Sinclair's usage nonetheless possesses a certain logic. The continual operation of variation and selection mechanisms can produce outputs that are functionally fitted to their environment, so long as an adequate number and type of variations are generated, and so long as 'the environment' is identified with whatever the selection mechanism actually selects for.

¹⁵ MBW Sinclair, 'The Use of Evolution Theory in Law' (1987) 67 U Det L Rev 451, 453.

C. Adaptationism, Natural Selection and Genetic Inertia

Under the assumption that law-making in general is an 'adaptive' process, or that certain types of law-making are,¹⁶ it might be expected that conclusions could be drawn from the current state of the law about the nature of the factors that were relevant in its formation, as if it were as easy as concluding the shape of a cup from the shape of the water filling it. Unlike water and cups, however, the same form may be produced by different values of the underlying factors.¹⁷ Even certain knowledge that a process is adaptive reveals less than we might hope about what was at play in bringing law to its present-day form, and our tendency to err is heightened once we allow that law might be an adaptation to multiple factors.¹⁸

Furthermore, if we assume not only that the law is adaptive but also make assumptions about the factors that law adapts to, then the current state of the law might be thought to provide empirical evidence of the forms most adapted to those factors. As Gordon has argued, however, comparative inquiry shows we are likely to be disappointed in that project. Similar socio-economic conditions often give rise to very different legal outcomes.¹⁹ Law is *not* adapted in the sense of being wholly determined by its environment. Of course, if we continually expand the factors we consider to be relevant, or fail to define those factors with any precision, then it might be possible to salvage the adaptive hypothesis. Doing so however forces us either to sacrifice falsifiability, because anything will fit into our explanation, or to abandon generality, because our explanations will tend toward the idiosyncratic.²⁰

Sinclair offered a different empirically-based critique of adaptationism, based largely in process rather than outcome.²¹ Sinclair's key evidence against adaptationist accounts of law was what he called the 'genetic inertia' of law-making: the tendency of rules to stay

¹⁶ Gordon (n 14) 1030–32.

¹⁷ To put it in mathematical terms again: if $y = f(x)$, we can only recover the x for a relevant value of y if f has a well-defined inverse, that is, if every x produces a unique y .

¹⁸ Kennedy articulates one version of this point, which is that once you allow even two explanatory factors, you have no way of distinguishing how much each contributed to the current legal form. Duncan Kennedy, 'Cost-Reduction Theory as Legitimation' (1981) 90 Yale LJ 1275, 1277. Gordon, in addition, points out that law is often a mediation of contradictory social needs, rather than a unified response to any one of those needs. Gordon (n 14) 1035.

¹⁹ Gordon (n 8) 75–81.

²⁰ Gordon (n 14) 1031–32; Kennedy (n 18) 1278–79; Sinclair (n 15) 471.

²¹ Sinclair argued that adaptationist accounts suffer from 'the empirical failure to account for the decisional inertia apparent in both judicial and legislative branches.' MBW Sinclair, 'Evolution in Law: Second Thoughts' (1993) 71 U Det Mercy L Rev 31, 42.

the same over time. It was, he argued, hard to maintain a belief in law's adaptation to social needs or to any other factor, given the tendency of law-makers, especially judges, to 'choose the variant already in place,' no matter how dizzying the array of alternatives at their disposal.²²

The solution favoured by Sinclair was to explain the law in the present as a product not only of external factors but also of past law.²³ Models that accounted for genetic inertia, he proposed, would be valid as evolutionary accounts, but would also provide a way to overcome the weaknesses of adaptationists accounts. Like others before and since, Sinclair drew on the example of the 'panda's thumb' to illustrate a phenomenon that clearly distinguishes evolution from design: the prevalence of second-best contraptions and the absence of well-designed contrivances.²⁴ In Sinclair's view, the lesson of the panda's thumb is that, in evolutionary processes, present forms are not only influenced by environmental selection but also constrained by past forms.²⁵

In the application of these concepts, it is important to beware of two potential missteps. First, mechanisms of variation, selection, and retention may be necessary features of a process if it is to be describable in evolutionary terms, but that does not necessarily make their presence sufficient for a process to be evolutionary. Second, the panda's thumb may result in part from the interaction of fitness pressures with genetic inertia, but that does not mean that a consideration of genetic inertia will automatically create an evolutionary

²² *ibid* 38. Note that Sinclair muddles questions at two levels of analysis. Unless we account for genetic inertia, it is true, as Sinclair concluded, that we risk both *misunderstanding* the process of legal change and *mischaracterizing* the outcomes of legal change. Yet Sinclair failed to distinguish between the how question—what does genetic inertia tell us about present law and processes of legal change—and the (sociological) concern with why law-makers were constrained to small variations. See Sinclair (n 15) 455–58; Sinclair (n 21) 37–38.

²³ Like simple functionalism, this idea can also be put in mathematical form: $y_2 = f(x_1, y_1)$, with the subscripts indexing time.

²⁴ Discussions of the panda's thumb and its relevance for how to think about evolution draw on 'The Panda's Peculiar Thumb,' an essay by the palaeontologist and evolutionary biologist Stephen Jay Gould, first published in 1978 and reproduced in his book *The Panda's Thumb: More Reflections in Natural History* (Norton 1980). The panda depends on its 'thumb' to help it grasp bamboo, its primary food source. The gist of Gould's anecdote is that, as the panda is descended from carnivorous bears, its 'thumb' is in essence no more than an extended wrist bone, significantly less fit to purpose than the human thumb, for example. The example is intended to show how the products of evolution differ from the products of design. For other uses of the panda's thumb in law, see Oona A Hathaway, 'Path Dependence in the Law: The Course and Pattern of Legal Change in a Common Law System' (2000–01) 86 *Iowa L Rev* 601, 616; Jeff L Lewin, 'The Genesis and Evolution of Legal Uncertainty about Reasonable Medical Certainty' (1998) 57 *Md L Rev* 380, 388; Allan C Hutchinson, *Evolution and the Common Law* (Cambridge University Press 2005) 52–53. Gould's distinction between (designed) contrivances and (evolved) contraptions, which he borrowed from Michael Ghiselin, was given central place in Adam J Hirsch, 'Inheritance Law, Legal Contraptions, and the Problem of Doctrinal Change' (2000) 79 *Or L Rev* 527.

²⁵ Sinclair (n 15) 455–57; Sinclair (n 21) 38.

account of legal change, let alone a satisfactory explanation of legal change, period. More pointedly, an account of retention is neither equivalent to nor reducible to an account of how new forms are limited to variations on old forms.²⁶

D. Evolutionary Entities and Varieties of Natural Selection

‘How does law evolve?’ is a perfect example of a mis-posed question.²⁷ Unless we specify the entity or entities whose transformations we are interested in understanding, we are bound to breed confusion and provoke avoidable disagreement. As we saw in previous chapters, the evolutionary idiom has been applied to legal phenomena in a variety of ways. The Coasean tradition has primarily been concerned with the evolution of discrete norms, but there are many, sometimes quite striking alternatives. Lewin, for instance, used an evolutionary frame to develop a genealogy of the phrase ‘reasonable medical certainty’ as applied in American law.²⁸ Luhmann’s primary application of evolutionary theory sought to explain the genesis and configuration of modern Western legal systems.²⁹ Hayek, too, concerned himself less with the processes through which individual norms and doctrines transform, and much more with what he called the ‘spontaneous’ origins of the market order and its legal underpinnings.³⁰ Oliver Goodenough has explicitly mooted the possibility that natural selection dynamics operate at the level of rule, doctrine, *and* legal system.³¹ Clarity about the nature of the object whose changes are being studied matters not only for analytical clarity, but because an evolutionary perspective may only generate insight at the right level of abstraction.³²

²⁶ For an example of this conflation, see Sinclair (n 15) 453.

²⁷ cf HLA Hart, ‘Definition and Theory in Jurisprudence [1954]’ in *Essays in Jurisprudence and Philosophy* (Oxford University Press 1983). Hart’s argument was that a great deal of muddle and headache in jurisprudential discussions could be avoided if we avoided questions like ‘what is law?’

²⁸ Lewin (n 24).

²⁹ Niklas Luhmann, *Law as a Social System* (Fatima Kastner and others eds, Klaus A Ziegert tr, Oxford University Press 2004) ch 6. Luhmann’s theories and his approach to legal evolution are explored in greater detail in Chapter 4.

³⁰ Friedrich A von Hayek, *Studies in Philosophy, Politics and Economics* (Routledge & K Paul 1967) chs 2, 4–7.; Erik Angner, ‘The History of Hayek’s Theory of Cultural Evolution’ (2002) 33 *Studies in History and Philosophy of Biological and Biomedical Sciences* 695. Hayek’s approach is discussed in greater detail in Chapter 1.

³¹ Oliver R Goodenough, ‘When Stuff Happens Isn’t Enough: How an Evolutionary Theory of Doctrinal and Legal System Development Can Enrich Comparative Legal Studies [Symposium on Evolutionary Approaches to (Comparative) Law: Integrating Theoretical Perspectives]’ (2011) 7 *Rev L & Econ* 805, 813.

³² Teubner argues that a ‘theory of legal evolution will be able to explain or even predict general structures of the law,’ but will generally not be able ‘to explain individual legal acts, court verdicts, laws, and administrative acts.’ Gunther Teubner, *Law as an Autopoietic System* (Zenon Bankowski ed, Anne Bankowska and Ruth Adler trs, Blackwell 1993) 49.

If 'how does law evolve' is a mis-posed question, it unfortunately turns out that 'what is evolving?' may not be the right question either. To see why, it will be helpful to review the development of the 'unit of selection' debate among philosophers of science since the late 1970s.³³ At first, this debate may appear to be an arcane episode from the philosophy of biology, whose participants have been more concerned with how certain words are to be applied than with trying to understand the nature of evolutionary processes. In substance, however, those debates were bound up with arguments about what kinds of entities could undergo evolution or participate in evolutionary processes, a question with consequences in turn for the possibility of group selection and for the role of evolution (if any) in the development of altruistic behaviours. Moreover, given that the goal of these debates was largely to develop an abstracted account of evolution, the conceptual repertoire that they generated turns out to be quite useful in any attempt to think through the possible application of evolutionary analogies to understand legal change.

Dawkins notoriously argued in *The Selfish Gene* that the proper unit of natural selection, which Dawkins sometimes referred to as the 'unit of selection,' was not the organism or species, but the gene.³⁴ One line of responses to this position, typified by the contribution of Stephen Jay Gould, argued that genes cannot be the unit of selection because selection per se does not operate at the level of the gene. Natural selection cannot 'see' individual genes. Selection processes operate through the relative reproductive success of whole organisms, determined primarily by differences in their whole phenotype. Because of pleiotropy and polygeny, selection pressures exercised on a population of varied phenotypes are not directly translated into selection pressures on genes themselves.³⁵ The debate made clear that debates over what the object of evolution *is* were largely attributable to disagreements about where stress should be placed in the Darwinian 'recipe.'³⁶

³³ The account in this paragraph and the next draws heavily from Peter Godfrey-Smith, 'The Replicator in Retrospect' (2000) 15 *Biology & Philosophy* 403.

³⁴ Dawkins (n 3). Dawkins borrowed much of his account from George Williams. Godfrey-Smith (n 33) 404.

³⁵ Godfrey-Smith identifies Stephen J Gould's essay 'Caring Groups and Selfish Genes' as exemplary of this line of argument. The essay was republished in Gould (n 24).

³⁶ Godfrey-Smith (n 33) 404.

David Hull proposed a compromise.³⁷ The problem, he argued, was that Dawkins and Gould were both trying to fit too much into a single concept, the 'unit of selection.' To put Hull's diagnosis in terms of the Darwinian algorithm, the problem is that the entities that are the primary participant in replication processes, which Hull followed Dawkins in calling *replicators*, have to be distinguished from the entities that interact with the environment and thereby cause or mediate differential replication, which Hull called *interactors*.

Hull's distinction has achieved broad acceptance among scholars who seek to clarify evolutionary processes.³⁸ One should note, however, that his typology did not so much solve the 'unit of selection' debate as dissolve it. Hull explicitly argued that asking after the 'real' unit of selection is a fool's errand. In the language I have been using thus far, there is no 'object of evolution.' The replicator plays one role, the interactor another. Hull's frame suggests that understanding processes of natural selection entails more than identifying the mechanisms of selection, variation, and inheritance operating on a previously-distinguished evolutionary object. Instead, he pushes us to search simultaneously for mechanisms, the different entities those mechanisms operate through, and the interactions between them.

One final nuance highlights a potential source of error in efforts to think through legal evolution, its mechanisms, and its objects. Hull largely followed Dawkins in discussing genes as replicators. The concept of the replicator remains bound up with the sense of self-replication that Dawkins gave it.³⁹ Genes, however, do not 'reproduce themselves.' Contra Dawkins, they do not even control the replication process. Rather, the capacity of a gene to perpetuate its form through time depends upon the existence and reproduction of the context in which that replication can take place. Trying to locate 'the' site of replication thus leads to a chicken and egg problem.⁴⁰ Peter Godfrey-Smith argues that while there is thus no replicator per se in the sense of an evolutionary object that is

³⁷ David L Hull, 'Individuality and Selection' (1980) 11 Annual Review of Ecology and Systematics 311. See also David Hull, 'The Units of Evolution: A Metaphysical Essay,' reprinted in RN Brandon and RM Burianm eds, *Genes, Organisms, Populations: Controversies over the Units of Selection* (MIT Press 1984).

³⁸ Notably, Dawkins soon followed in Hull's footsteps, offering his own distinction between *replicators* and *vehicles*. For the influence of Hull's distinction, see e.g. Elisabeth Lloyd, 'Units and Levels of Selection' in Edward N Zalta (ed), *The Stanford Encyclopedia of Philosophy* (Summer 2017 edn, Metaphysics Research Lab, Stanford University 2017).

³⁹ Godfrey-Smith (n 33) 411–13.

⁴⁰ *ibid* 407–11. Think of mammal gestation. The genetic code in the zygote would not get very far without being implanted in a womb. Both the code and the womb must be replicated.

causally responsible for the perpetuation of a given structure, the replicator concept is nonetheless useful insofar as it helps to locate the 'heritability of variation.'⁴¹ At least in biology, it is possible to identify the locus at which, and the mode by which, variations are inherited across generations: an organism's genetic code.

Finally, Godfrey-Smith and others offer convincing arguments that evolution can occur through the operation of the Darwinian algorithm without the need for replicators. Though biotic evolution here on Earth operates through a set of entities that have a causal role both in reproduction and the inheritance of variation, they are not essential features of processes describable by the Darwinian recipe.⁴² Godfrey-Smith argues that, 'we can see the replicator analysis as picking out a special case of what is covered (or supposed to be covered) by the classical view,' that is to say, a view expressed in terms of the Darwinian algorithm alone.⁴³ It is possible, for example, for a population of entities to be reproduced over time by a process wholly external to them. So long as there is a mechanism that ensures the heritability of variation and selective reproduction on the basis of that variation, something like evolution by natural selection will occur.⁴⁴

E. Varieties of Natural Selection in Theories of Legal Change

Let me draw out the import of these discussions for inquiries into law and legal change. Though Hull's argument made a big splash, it did not change the paradigm overnight. It thus had understandably little uptake in discussions of legal evolution as they underwent renewal in the early 1980s.⁴⁵ Even today, if debates among legal scholars pay attention to the Darwinian algorithm, they tend to imagine the three mechanisms each applying to the same entity.⁴⁶ They therefore continue to limit the explanatory task to the identification of the causes of variation in a given population of entities, the method by which those

⁴¹ *ibid* 413.

⁴² *ibid* 413–14.

⁴³ John S Wilkins and Pierrick Bourrat, 'Replication and Reproduction' in Edward N Zalta (ed), *The Stanford Encyclopedia of Philosophy* (Winter 2018 edn, Metaphysics Research Lab, Stanford University 2018) quoting Peter Godfrey-Smith, *Darwinian Populations and Natural Selection* (Oxford University Press 2009) 36.

⁴⁴ *ibid* s 5.2.

⁴⁵ Godfrey-Smith argues that broader uptake of Hull's framework could have cleared up much of the debate in biology over the last 30 years. Godfrey-Smith (n 33) 405–06.

⁴⁶ In legal literature, Dawkins gets quoted a great deal, and Hull hardly at all.

entities reproduce over time, and the process that selects more from less successful types of those entities.⁴⁷

This approach is not necessarily wrong, but it is based on a facile understanding of evolutionary theory, and especially of recent understandings of how evolution functions in the biological domain. Any effort to understand legal change through the rubric of evolution via natural selection must confront the question of how similar the process is supposed to be to evolution as applied to plants, animals, and bacteria. Law may be subject to a form of natural selection that is sufficiently captured by what Godfrey-Smith calls 'the classical view.' If that were the case, then the task of understanding legal change would be reducible, first, to the identification of the set of relevant entities, such as legal norms and, second, to the description of how variation in those entities is introduced, selected for, and passed on.

If law's evolution echoes the biological model more closely, however, then the task demands attention to a series of distinctions and connections. Among those who have drawn on evolutionary theory in an attempt to theorize legal change, Simon Deakin seems exceptional in having considered how nuances of evolutionary theory might complicate the application of the Darwinian algorithm to legal phenomena.⁴⁸ Having immersed himself in the recent literature, he has deployed Hull's ideas (though without taking note of their provenance or their specific importance).⁴⁹ And the analytical payoff from having done so is clear. Rather than simply seeking to develop an account of each element of the

⁴⁷ See e.g. 'a system which replicates itself over time, but with some faults in the fidelity of transmission, will produce variations, and ... those variations ... if subject to some kind of differential success pressure ... will lead to the emergence and perseverance of those variations which ... do better at the mix of success.' Goodenough (n 31) 810–11.

⁴⁸ Deakin's citations to evolutionary theory in his agenda-setting 2002 article include books and articles by Robert Boyd, Peter Richerson, Kevin Laland, Luca Cavalli-Sforza, Marcus Feldman, as well conversations with his sometime-collaborator Geoffrey Hodgson. One likely candidate as an inspiration for Deakin's exposure to Hull is Geoffrey Hodgson, 'Is Social Evolution Lamarckian or Darwinian?' in John Laurent and John Nightingale (eds), *Darwinism and Evolutionary Economics* (Edward Elgar 2001).

⁴⁹ Simon Deakin, 'Evolution for Our Time: A Theory of Legal Memetics' (2002) 55 CLP 1, 30–32; Simon Deakin and Fabio Carvalho, 'System and Evolution in Corporate Governance' in Peer Zumbansen and Galf-Peter Calliess (eds), *Law, Economics and Evolutionary Theory* (Edward Elgar 2011) 120–23. Deakin has spent relatively little space addressing how his theoretical approach differs from earlier attempts at evolutionary jurisprudence. He is clear in a number of places about how his conclusions differ from e.g. Hayek. Deakin, 'Evolution for Our Time' 33–37; Simon Deakin and others, 'Legal Institutionalism: Capitalism and the Constitutive Role of Law' (2017) 45 Journal of Comparative Economics 188, 190–91. He is also clear about the claims that he is borrowing from other theorists of legal change, especially in evolutionary institutional economics and systems theory. Simon Deakin, 'Legal Evolution: Integrating Economic and Systemic Approaches' (2011) 7 Rev L & Econ 659. Nonetheless, he spends little time trying to locate or explore the origins of his differences with other scholars, and specifically does not spend any time analysing different applications of or appropriations from evolutionary theory.

tripartite algorithm, Deakin drew on Hull's distinction between interactors and replicators to develop a schema comprising five elements:

- i. a unit of inheritance,
- ii. a mechanism of inheritance,
- iii. a mechanism of variation,
- iv. a unit of selection,
- v. a mechanism of selection.⁵⁰

The precise structure of Deakin's schema may not be the only way to work out an account of legal change through natural selection. Nonetheless, his schema reflects a number of key insights. First, if we understand law to not only be subject to natural selection, but to also be self-replicating in some meaningful way, then we need to be cognizant that the entities which are selected for (i.e. Hull's interactor or Deakin's unit of selection) may not be the same as those involved in the reproductions of the successful variants (i.e. Hull's replicator or Deakin's unit of inheritance). Second, we may need to distinguish the mechanisms and entities that ensure the heritability of variation from the processes involved in the reproduction of the entities more generally. Finally, we must attend to interactions between the mechanism of variation and the broader set of processes that are involved in the reproduction of the entity or entities.

This last point may be particularly relevant in discussions of legal change. The genetic code carries variations produced in one generation into future generations, but it also participates in the replication process in its own right.⁵¹ Genetic inertia in biotic evolution is a by-product of the constraint that the reproductive life-cycle exercises on heritable variations. Variations that are too severe will be incompatible with the broader reproductive process. Deakin and Luhmann have suggested that the relative stability of legal norms may be a result of similar constraints.⁵² There is by contrast nothing in the classical view that places limits on how different future variations can be from old forms. Without the parallel to biotic evolution, the genetic inertia of law underscored by Sinclair becomes a contingent empirical fact about some legal norms.

⁵⁰ Deakin, 'Evolution for Our Time' (n 49) 30–33. One important note: though this schema includes a 'unit of selection,' Deakin is not rehashing the 'unit of selection' debate. Rather, where his unit of inheritance corresponds roughly to Hull's replicator, the 'unit of selection' corresponds to Hull's interactor, that is, the locus at which the selection mechanism operates.

⁵¹ As a result of the Weismann barrier, the genetic code is the *only* vehicle for carrying variations between generations.

⁵² Per Deakin and Carvalho, the 'legal system must be able to maintain the principle of system congruence which is the precondition of its autonomy and self-reproduction.' Deakin and Carvalho (n 49) 128.

When it comes to trying to theorize legal change, we are therefore left with three possibilities. A set of legal entities may change in accordance with the ‘classical view’ of Darwinian natural selection,⁵³ reducing the epistemic task to the correct identification of the evolving entities, and the mechanisms of variation, selection, and inheritance by which those entities evolve. Such an account will also depend on clearly developed premises about how the entities and process are reproduced over time, but the reproduction process may be wholly separate from the evolutionary mechanisms. Alternatively, a process of legal change may more closely parallel biotic evolution, in which case the explanation will have to account not only for the nature of the relevant mechanisms but also for the multiple units which are involved in those mechanisms, and the complex interactions between differential reproduction and the inheritance of variation. The third option is to accept that the process may not be amenable to description by anything resembling the Darwinian algorithm at all, although it might still count as ‘evolutionary’ by the criteria set out in Chapter 1.⁵⁴

II. Coasean Approaches with and without Adaptationism

Part III explores the salience of some epistemic aspects of law and legal change to draw attention to a substantial flaw in the Coasean accounts of legal change. That explanation however will require getting under the hood of Coasean approaches, to more closely examine the nitty-gritties of how these approaches understand law itself. To put that discussion on solid footing, this part works through the details of an early contribution made by William Landes and Richard Posner.⁵⁵ I treat their article as a proxy for the broader literature.⁵⁶ To a significant degree, Landes–Posner supersedes other work on legal change in the Coasean mode, by adding conceptual clarity and mathematical rigour lacking in earlier contributions but without materially departing from their basic structure.⁵⁷ Landes and Posner are candid about the assumptions that ground their

⁵³ Above, text to n 43.

⁵⁴ There is another alternative. As I explored in Chapter 1, biotic evolution turns out to be mediated by much more than just Darwinian natural selection. As such, evolutionary theory is more expansive than the theory of how natural selection processes might work in practice. The other possibility is thus that a process of legal change operates through a mechanism that has analogies with some other part of evolutionary theory: sexual selection, or genetic drift, for example.

⁵⁵ William M Landes and Richard A Posner, ‘Adjudication as a Private Good’ (1979) 8 J Legal Stud 235.

⁵⁶ Note I use ‘Landes–Posner’ to refer to the model developed in Landes and Posner’s paper.

⁵⁷ For example, the model developed by Landes and Posner takes in both Rubin’s and Goodman’s accounts as special cases. cf Paul H Rubin, ‘Why is the Common Law Efficient’ (1977) 6 J Legal Stud 51; John C Goodman, ‘An Economic Theory of the Evolution of Common Law’ (1978) 7 J Legal Stud 393.

conclusions, and admirably circumspect about the context in which those conclusions hold.⁵⁸ Most importantly for my purposes, their analysis considers how the doctrine of precedent leads past law to act as a constraint on future legal change, which means that their model integrates an account of law's genetic inertia. In what follows, I lay out the basic structure of their model, paying attention to how they characterise law, its effects on incentive structures faced by those subjected to it, the behaviour that arises under those incentives, and the aggregate impact that behaviour has on legal change through the courts.

A. Landes–Posner: A Coasean Exemplar

Here is the world that Landes and Posner draw.⁵⁹ First, two agents are engaged in an *activity*. Participation in the activity by the two agents inevitably gives rise to *adverse events*. Adverse events in the Landes–Posner model are stochastic and, most importantly, legally salient. The first term means that, while particular events are unpredictable, their occurrence follows a probabilistic pattern. The second indicates that while the occurrence of an adverse event generally entails a harm that imposes incidental, immediate costs for at least one of the agents, possibly both,⁶⁰ an occurrence only counts as adverse events for the purposes of the model if they give rise to a *legal dispute* amenable to possible resolution through adjudication or negotiated settlement.

Three points of clarification are needed before moving on. The first is that 'activity' has a somewhat peculiar meaning in Landes–Posner. In some of the situations the model is intended to capture, the nature and degree of the two agents will be sufficiently similar to make Landes and Posner's usage line up with common sense understandings of what it means for two persons to be mutually engaged in an activity. Consider two drivers on the road, for example, or a supplier and purchaser in a commercial contract. The shared activity is clear. Often however, our intuition about a situation would lead us to describe only one of the agents as active, and the other as a passive bystander. It is not obvious, for example, what 'activity' Mrs. Palsgraf was engaged in at the train station the day she was

⁵⁸ Notably, while the bulk of their article is given over to extending and deepening the approach developed by Rubin and Goodman, the last few pages are given to an extension of the approach pioneered by Priest which reproduces his fundamental logical errors. Landes and Posner (n 55) 280–84.

⁵⁹ On the idea of economic modelling as world-building, cf Steven G Medema, "A Magnificent Business Prospect . . ." the Coase Theorem, the Extortion Problem, and the Creation of Coase Theorem Worlds' (2015) 11 *Journal of Institutional Economics* 353.

⁶⁰ In point of fact, adverse events may give rise not only to costs for one or both parties, but to benefits as well. See below n 65.

injured.⁶¹ Nonetheless, it will generally be possible to frame the presence of both agents at a given location or their common exposure to a certain interaction as ‘engagement in a shared activity.’ The manufacturer and the final purchaser of a snail-corrupted ginger beer could be said to both be engaged in the activity of ‘buying and selling a bottle of ginger beer.’⁶² Ranchers and farmers, we might say, are engaged in potentially incompatible uses of neighbouring pieces of land.⁶³ Such examples highlight how trying to slot the various assemblages of entities, relations, and events which instigate legal disputes under the category of engaging in a mutual activity is a fraught exercise, that in some cases cannot be earnestly achieved. Despite the semantic violence it does to the usual sense of the word, however, the use of ‘activity’ to capture any joint course of action that has the possibility of giving rise to a legal dispute between two people is not so odd that it compels us to depart from Landes and Posner’s usage.⁶⁴

Second: Landes and Posner do not use ‘adverse events’ but rather ‘accidents.’ Like most of the contributions to the Coasean tradition to legal change, Landes and Posner drew their explicatory examples primarily from negligence cases, where the instigating event will often be an accident in its everyday meaning as well. In other areas, however, the kind of events that give rise to legal disputes include situations that are not commonly brought under that label. For example, the category includes not only situations in which a party to a contract becomes unable to fulfil its contractual responsibilities but those where it becomes unwilling to do so. My alternative term, ‘adverse events,’ though still imperfect, captures a broader collection of mishaps and resonates with the conflict implied by the creation of a legal dispute between the two parties.

⁶¹ *Palsgraf v Long Island Railroad Co* 162 NE 99 (United States New York Court of Appeals 1928). This case is a classic of the doctrine of foreseeability in the common law of negligence, in which, by helping a man onto a train, employees of a railroad caused a chain reaction that led to injuries suffered by the plaintiff. The court found the defendants did not owe the plaintiff a duty of care because the injuries were not a foreseeable consequence of helping a man onto the train.

⁶² *Donoghue v Stevenson* [1932] AC 562 (HL).

⁶³ Chapter 2.

⁶⁴ The strictly bilateral framing of the activity in the Coasean approach is linked to Coase’s view that, when it comes to correctly thinking about the legal approach to situations in which one party harms another, it takes two to tango. Coase (n 1) 2. Our intuition may be that the pedestrian, walking along a part of suburban sidewalk that crosses a driveway, who is run down by a car entering that driveway and suffers grievous injury, is clearly the one harmed. Coase would insist however that the proper legal view would not only embrace the risk of such injury, but also the amounts actors will take in the future to avoid such accidents and any reduction in their quality of life as a result of having to engage in the activity less. It might be for example that the pedestrian could have more easily avoided the accident than the driver, and the principles of tort law accord with the economic analysis of law that an injured plaintiff’s level of precaution is relevant to determining the holding in the case.

Moving from language to the substance of the model, I note that, for the purposes of the incident dispute, Landes–Posner ignores the direct harms occasioned by an adverse event. Though the harms attributable to expected future events enter into their reasoning, the harms occasioned in the present are relevant only insofar as they serve to mark the triggering of a legal dispute in which one party has a potential legal claim for damages against the other.⁶⁵

Having dispensed with these possible sources of confusion, let me engage with the remainder of their analysis. The conduct of the activity and the outcome of the legal dispute are each disciplined by, but not determined by, law. Inasmuch as Landes-Posner take law to be composed of rules, those rules are not analysed as norms that effectively require or enjoin an actor from engaging in or refraining from certain actions, activities, or forms of performance.⁶⁶ Instead, in keeping with the tradition of the American legal realists, Landes–Posner find law expressed, first, in the probability that the court will decide in favour of one party rather than the other if a legal dispute is adjudicated; and, second, in the actual and effective power of the court to levy damages against a defendant if and when it finds for a plaintiff.⁶⁷

⁶⁵ Landes and Posner use ‘damages’ two ways, to refer to the costs imposed on the parties by an adverse event, and to refer to the amount demanded in the incident legal dispute. The conflation of the two amounts is understandable, given that they develop their analysis using a simplified account of negligence law. A fundamental intuition in negligence cases is that, where the plaintiff is found liable, the defendant will be required to make ‘full compensation,’ a principle taken to mean that the damages imposed at the end of a successful suit will be equivalent to the harms occasioned by the accident.

Yet the two amounts certainly cannot be treated as equivalent in general. A moment’s contemplation will bring to mind legal contexts in which there is a mismatch between the total harms suffered and the damages demanded and/or receivable as remedy. For example, even if both parties to an automobile accident are harmed, the legal dispute will often only concern the liability attributable to and damages to be imposed on the defendant. Or even if the plaintiff is the only one harmed, there may be contributory negligence on their part. In either of these situations, the stakes of the case will be less than the combined value of the harms occasioned by the accident. If we turn our mind to contract, and to adverse events that entail a contractual breach, then, under the usual contract principle that the victim of a breach will be compensated for their lost profits, we may have cases of ‘efficient breach.’ As efficient breach by definition occurs in the context of a change of circumstances that ultimately allows for a net increase in productive output compared to contractual compliance, the damages at stake in such a dispute are a matter of ex post redistribution of a net windfall. See Richard A Posner, *Economic Analysis of Law* (1st edn, Little, Brown 1972) 55–59. Fortunately, Landes and Posner’s slippage between the two meanings of damages does not impact on their conclusions, because their model does not depend on the precise scale of the present or future cost consequences directly occasioned by adverse events. For the sake of clarity, I nonetheless strictly differentiate ‘damages’ recoverable in a legal dispute from the harms (costs) or windfall (benefits) occasioned by the adverse event that gives rise to it.

⁶⁶ As put by Kornhauser, in the economic approach, legal rules cannot *command* behaviour but only structure the incentives of engaging in various courses of action. Lewis A Kornhauser, ‘The New Economic Analysis of Law: Legal Rules as Incentives’ in Nicholas Mercuro (ed), *Law and Economics* (Kluwer Academic 1989) 35.

⁶⁷ Famous examples of this model from the Realists include Holmes’ claim that law consists of ‘[t]he prophecies of what the courts will do in fact, and nothing more pretentious;’ and Llewellyn’s

Their account of how law changes builds on a model of what litigants do in an individual dispute. There are three possible outcomes: the first is a negotiated settlement, and the second and third are the two possible holdings if the dispute is litigated. The parties therefore decide between a settlement at some mutually-agreeable price and the uncertainties of putting the question before the judge, thus engaging in what might be called strategic action in the shadow of the law.⁶⁸

Per the model, each party decides whether to accept a settlement or proceed to trial on the basis of a calculation that compares not only the immediate financial impact of each possible outcome, but the long-term financial consequences of the law that will prevail in any of them. For that reason, the model of the parties' decision-making process is built atop a complicated model of the relationship between law and behaviour. The idea is that each party will adjust their behaviour so as to maximize their own net benefit from the regulated activity, engaging to the amount and in such ways so as to equalize their marginal costs with their marginal benefits. The benefits are straightforward. In the example of a driver and pedestrian, they might include whatever advantage a person extracts from driving in their car. A party's costs of the activity include the direct harms they can expect to bear in the event of an adverse event,⁶⁹ weighted by the expected number of such events, along with spending to prevent adverse events and to mitigate their harms. The 'law' enters into the picture by reshaping costs. Specifically, the rule determines the amount that the defendant expects to have to pay, or that the plaintiff expects to receive, when adverse events do occur. The total costs of engaging in the activity thus includes the direct costs, abated or aggravated by these expected legal pay-outs. If a party's costs make the activity uneconomical at any level of intensity, then the party will not engage in it at all.

characterization: 'What these officials do about disputes is, to my mind, the law itself.' Oliver Wendell Holmes, 'The Path of the Law [1897]' (1997) 110 Harv L Rev 991, 994; Karl Nickerson Llewellyn, *The Bramble Bush: The Classic Lectures on the Law and Law School* (Oxford University Press 1930) 5.

⁶⁸ Mnookin and Kornhauser's classic on 'bargaining in the shadow of the law' was concerned with the relationship between agreements crafted through private ordering and the default rules provided by the state, e.g. how divorcing couples might structure their relationship given shared knowledge of determinate rules the court would impose if a bargained solution were not found. Robert H Mnookin and Lewis Kornhauser, 'Bargaining in the Shadow of the Law: The Case of Divorce' (1978-79) 88 Yale LJ 950. They did not, however, analyse the calculations of the parties concerning the consequences of success or failure on specific issues were the dispute were to go to trial, save to note that risk preferences would shape the bargained settlement. *ibid* 969.

⁶⁹ ... or the benefits they expect to secure, as discussed above, n 65.

The nature of the calculations being mooted here are even more complex than they may seem at first. That is because the prevalence of adverse events will be a function of whether and how much each party engages in the activity, and of how much each spends on prevention and mitigation. Since the likelihood depends on the behaviour of both parties, each party's decision about how to act will implicitly rely on full knowledge of how the other party will behave under the current state of the law.⁷⁰ That means not only do the parties have common knowledge about the prevalence of adverse events under every given combination of activity levels for a given state of the law, but they also agree on how a court might respond if an adverse event does occur.

The motor driving the model is the set of calculations each party makes of the net, risk-weighted costs and benefits they will face in each scenario.⁷¹ For the three possible states of the law—the status quo rule if they choose to settle, and the slightly amended precedents that would result from a judge's decision in favour of the plaintiff or vice versa—each party will do a prospective calculation, as above, concerning their net benefit of engaging in the activity, given the state of the law and reasonable expectations about the maximizing behaviour of the other party.

The loop is closed by the premise that both parties will choose what to do in a specific legal dispute so as to maximize their expected net benefit, taking into account both the direct payments, or damages, in the instant case, and the net return from the activity under the status quo ante legal rule.⁷² If the case goes to trial, and the judge finds in favour of the defendant, the expected financial impact will comprise the long-term effect that the new law has on the party's interest, supplemented by the pay-out of damages; if in favour of the plaintiff, then the interests of the parties will only be affected by the content of the amended law.⁷³ The calculation of the expected return from going to trial

⁷⁰ The reasoning here may seem paradoxical. Each party must choose his or her course of action using a maximizing calculation that includes an assessment of the risk of accident. Yet the effective risk of accidents will be a function of the activity levels actually chosen by both parties. In actuality, no paradox or circular reasoning is involved. Rather, the calculation is a 'simple' matter of both parties solving the same pair of linked, second order differential equations, based on common knowledge of each party's preferences, and shared confidence that the other party's choice of action will also be based on a calculated solution to the same set of equations. These may be courageous assumptions, but they are not internally contradictory.

⁷¹ The net gains and losses are risk-weighted in the sense of being discounted by the expected frequency of future adverse events.

⁷² The model also notes that the aggregate impact of the trial includes the costs of litigation for each party.

⁷³ Rather than understanding the law as an either/or liability, the model assumes that the law changes slightly whenever the judge rules on a legal issue, incrementally adding to a body of precedent that determines the probability of future decisions under the rule.

is a sum of these two amounts, weighted by the probability of the corresponding outcome. The benefit of settling, by contrast, is calculated by adding the net returns of engaging in the activity under the current state of the law, plus or minus whatever pay-off the parties agree to settle for.

As a result of these calculations, parties will either settle for some mutually agreeable amount or put the case to a judge. If the dispute does go to trial, the law will shift slightly toward or away from liability, depending on who the judge finds for. If the dispute does not go to trial, the law will stay unchanged. The dynamic element, finally, enters as a result of this process being repeated over and over, with each episode where the dispute goes to litigation adding to an accumulated shift in the likely assignment of future liability.

There will be more to say about the nature of the accumulation of legal decisions that Landes and Posner develop in their model, but it will be convenient to leave the exposition of their approach until the next part of the chapter.

III.A Deeper Problem with Coasean Approaches to Legal Change

Having set out this picture, let me return to the task of evaluation and critique, by exposing the Coasean approach to some of the questions raised by the borrowings and adaptations from evolutionary theory explored above.

A. Landes–Posner: A Coasean Model sans Adaptationism

I begin with the question of genetic inertia and the hazards of adaptationism.

Many early iterations of the Coasean approach to legal change fell afoul of Sinclair's broadside against adaptationism in legal theorizing, and for precisely the reason he had forecast. The early contributions to the Coasean tradition of legal change, much as he observed, included no account of the genetic inertia of rules.⁷⁴ Indeed, in their low-level details, many of these models characterized legal change like an on-off switch that could move only from the worse to the better or like the long-term equilibrium behaviour of the spins of a roulette wheel.⁷⁵ The result is not only an account that ignores the tendency of judges to stick with existing rules, but a set of accounts that predict gradual movement toward a status quo almost entirely adapted to efficiency.

⁷⁴ Sinclair (n 21) 34–36.

⁷⁵ Chapter 2, Part IV.

Sinclair's critique fails to land its blows on Landes-Posner, however. Even though their account of law's import for individual behaviour matched the earlier accounts, Landes and Posner's model offers a much thicker, more substantive account of law. As noted in the conclusions of Chapter 2, the Coasean framework is founded on a thin account of normativity that only considers law's power to coerce by changing economic incentives, not its power to persuade through reason.⁷⁶

Nevertheless, the peculiarity of Landes-Posner's model is that it provides an account of law that transcends the behavioural-pricing function of norms. For the purposes of modelling individual decision-making, Landes and Posner characterize law only in terms of how it shapes the expected value of damages to be awarded following the occurrence of future adverse events. The dynamic part of their model, however, portrays law as a continually growing archive of decisions about similar cases, an archive whose contents bulge, buckle, and wither as new cases are decided. Both the size and the normative consistency of that archive matter: the number and distribution of holdings in past decisions help to determine how much one case can be expected to rebalance the court's behaviour in the future. In their model, law as an archive of past decisions not only shapes how big an effect an individual case can have for the pricing aspect of the law, but also has a persistent effect on the outcomes of future legal disputes.

Landes and Posner thus provided precisely the account of retention that Sinclair suggested would be required of a truly evolutionary approach to legal change. To a significant degree, the way in which this transformed the projections of the Coasean model about the long-term behaviour of law and the nature of processes of legal change vindicates Sinclair's argument about the analytical payoff of doing so. Once the Coaseans took into account the bias in law-making in favour of old forms, the resulting models of the law-making process were transformed in precisely the ways that we would expect from a truly 'evolutionary' account of law. In particular, Landes and Posner's predictions about the tendency of law is that efficiency would act as a driver of trends in legal decisions, but that law would only adapt fully to efficiency for a portion of doctrines and rules.

⁷⁶ Though the Landes-Posner approach treats law as the probability of a cost being imposed by a court in response to an uncertain but statistically predictable event, they assume that the amount can be assimilated to a single cost through appropriate risk discounting. For the tradition of modelling law as a cost or price on behaviour in the neoclassical economic analysis of law, see generally Kornhauser (n 66).

There is thus nothing to the Coasean approach that makes it essentially adaptationist. As a broad mode of theorizing legal change, it not only can be integrated with rich accounts of law's genetic inertia, it actually has been.

B. Evolutionary Units and Evolutionary Mechanisms in the Coasean Approach

Having dispatched this particular line of attack on the Coasean approach to legal change, however, this part subjects the Coasean approach to more exacting scrutiny and finds some troublingly shaky foundations.

The discussion of evolutionary concepts in Part I ended with the argument that evolutionary theories of legal change might fall into one of three categories. They may be elaborated without any meaningful reliance on natural selection or other concepts drawn from evolutionary theory. They may be amenable to a simplified, 'classical view' of evolution, with a single type of entity reproduced by some external process. Or they may cleave more closely by analogy to the Darwinian account of biotic evolution through natural selection.

At first glance, the Landes-Posner model seems amenable to the classic view. The unit of selection, that is to say the object of evolution, is the legal norm. The norm exists at a given point in time as a body of precedent. Variation, such as it is, subsists in the different potential states of the law that might prevail following a judge's decision. Though these variants only potentially 'exist' as valid norms unless and until one of them is selected by a judge's decision at trial, we can imagine these variants corresponding to the norms implicit in the conflicting arguments of the parties. In this interpretation, the mechanism of selection operates in a combination of one or two moments: first, the decision of the parties to a legal dispute about whether to go to trial and, second, if a trial occurs, the judge's decision regarding whose argument will prevail and, accordingly, what ruling will be contributed to the existing body of precedent.

A simple but critical question puts the classical view in doubt. What is the mechanism of inheritance? Put differently, how is the legal norm in this account replicated? How are variations inherited? A naive answer would be that selected variations are simply added to the body of precedent that is applicable to a given type of dispute.

For legal norms to undergo natural selection, there must be some process that reproduces ‘precedents applicable to a given type of dispute’ over time. Though it is easy to miss, this not only demands some mechanism to reproduce the body of precedents, but depends on relatively stable reproduction of the ‘types of dispute’ to which those precedents apply, as well.

At first, putting it this way sounds absurd. One might insist that legal disputes do not need to be ‘reproduced’ since they are, in a sense, naturally occurring. The processes that generate them are combinations of human self-interest, scarcity, and misfortune. Accidents happen, and someone must pay. Rightly so. There is no disagreement there.

As much as legal disputes themselves need not be reproduced, however, the *classification* of disputes does. And, fatally for the pertinence of the classical view to an evolutionary account of changing legal norms, the reproduction of dispute types interacts in complex ways with the replication of legal norms. Rather than continuing with evolutionary abstractions, however, let me justify this claim by returning to the details of Coasean models.

C. Heterogeneous Contexts

To illustrate this, I will again turn to Landes and Posner’s model, prefaced with a point about the Coasean tradition originally raised by Gillian Hadfield in a woefully underappreciated contribution to the ‘efficiency of common law’ literature.⁷⁷ Hadfield’s intervention turns on a single insight: the contexts to which a rule applies are heterogeneous.⁷⁸ She is making both a narrower point here, and a broader one. Hadfield’s emphasis was on the narrower point, that a rule can have divergent cost consequences, depending on the particular features of an activity falling under it. A fortiori, a rule may be efficient for some actors some of the time, but at least in some cases it will not be.⁷⁹ This heterogeneity of cost outcomes arises because contexts are heterogeneous in a

⁷⁷ Gillian K Hadfield, ‘Bias in the Evolution of Legal Rules Symposium: Positive Political Theory and Public Law’ (1992) 80 Geo L J 583.

⁷⁸ Hadfield talks about rules having ‘precedential effect for a collection of similar, but not identical, cases.’ *ibid* 584–85. She does not however seem to have in mind the understanding of a ‘case’ familiar in legal discussions, namely, an episode in which an activity has already given rise to legal dispute under a rule. Rather, as made clear by the contrast she draws between the ‘full set of cases’ and ‘a random sample of activities,’ she uses the term to capture the whole collection of (potential) activities to which a rule applies. *ibid* 585. She is, however, inconsistent in this usage. Her claim that ‘cases before the court.... will constitute a biased sample of all possible cases’ mixes the two concepts. *ibid*. Given the threats that overused terms create of being misunderstood, I have used ‘contexts’ rather than ‘cases.’

⁷⁹ Hadfield (n 77) 587.

simpler sense. This is the broader point, and the more relevant one in what follows. Inasmuch as a rule functions to map from states of affairs to legal outcomes, those mappings are not one-to-one but one-to-many. In other words, many different states of affairs inevitably come under the same rule.⁸⁰

Hadfield's intention was to inject a small dose of realism into the Coasean approach to legal change. Yet her line of critique raises a set of fundamental questions that are obscured when law is understood to arise from repeated episodes of the same actors interacting in roughly the same set of circumstances. The same law will impinge on a multitude of different actors, engaged in different albeit similar activities.

D. Problems of Shared Knowledge

With these two points in mind, it becomes easier to see how Landes–Posner smuggled in a not-very-believable assumption about law. To see how, I reconstruct a generalized version of their model, starting with those portions that do not rely on or refer to law. That would entail a population of economic actors who can participate in a heterogeneous collection of activities. Any of those activities will generate a collection of costs and benefits, both direct and indirect, certain and uncertain. The costs and benefits of engaging in those activities depend on how other members of the population choose to behave, though how much the activities of others will matter can vary from basically not at all to very much indeed.

We can then add the law back into this model with the goal of working toward a generalization of the Landes–Posner model in this enlarged setting. Doing so, we would first note that the marginal costs and benefits of engaging in a given activity include not only expected gains or losses from occasional, unpredictable mishaps but also any expected damages to be received or paid whenever an adverse event leads to the imposition of liability under a legal rule. This begs the question of how this affects the calculations of the actors.

Here we arrive at some seemingly innocent but practically disruptive questions. How do actors know what activities are subject to any given rule when they make the calculations that predict and determine their future courses of action? Put differently, how do they differentiate between engaging in an activity that might give rise to a legally-salient

⁸⁰ *ibid* 584–85, 586–87.

adverse event, versus one that simply hazards an occasional loss-imposing mishap? Second, how does a person differentiate between having suffered an adverse event, whose costs might be offset by a legally-backed damages award, and mere misfortune, whose costs they must bear alone? Third, when an adverse event does occur, how does a harmed party know to whom the prevailing rule applies for the purposes of seeking damages? And by the same token, when a person is planning their activities, how do they identify the counterparties to whom they may be liable under that rule if an adverse event does occur?

Landes-Posner and the collection of models it exemplifies are totally silent on the *how* aspect of these questions. Nevertheless, the assumption that actors have common knowledge of the answers to these questions is crucial to their analysis. Though this assumption is never made explicit, the calculations imputed to parties in deciding how to proceed in a legal dispute, namely whether to litigate or settle and how much to settle for, depend on comprehensive, mutual knowledge of each party's future opportunity set vis-à-vis the rule. Their model works, in particular, only if they share a clear and uncontroversial understanding of the boundary between engaging in an activity subject to the rule and abstaining from it. It depends furthermore on a consensus between the parties about whether or not an adverse event has occurred, as well as a confidence that this judgement will not waver in the future.

If we wanted to extend the Landes-Posner model to a population of more than two actors, the implicit epistemic assumptions would be even more exacting. The calculations performed by the parties to the dispute would require that each have a complete catalogue of and extensive data about all other actors whose interests will be at stake if the relevant activity is pursued. The extended model would also depend on the parties being unanimous with this large population of economic actors about the boundaries of the activity subject to a rule. Moreover, the math in this extended model would only work under the assumption that no controversy could be expected about whether an adverse event has or has not occurred. In particular, the capacity of the parties both to choose a rational course of action in relation to a particular set of rules, and in many cases within the dispute itself, would depend on the whole population having common knowledge of

the activity set subject to the rule and of the nature of what would and would not count as an adverse event for the purposes of the rule.⁸¹

E. Unrealism and the Positive Method in Economics

At this point it will be useful to foreground the question of ‘unrealism’ in economic models. The extended Posner–Landes model depends on economic actors not only enjoying common knowledge of rationality, but having joint knowledge of the preference functions of a large, nominally indeterminate population of co-actors, as well.⁸² It requires a depth and complexity of mathematical calculation that would be hard for modern supercomputers, let alone the average legal subject, even if actor preferences could be quantified and made publicly available.⁸³ Champions of the Coasean approach might respond that the unrealism of this implication is irrelevant. The point of a model, after all, is not to capture every last detail of the world.⁸⁴ In accordance with Milton Friedman’s notorious argument defending the use of unrealistic assumptions about the micro-structure and micro-motives of economic actors in models aimed at understanding macro-systems and macro-behaviour, Coaseans might insist that the measure of a model’s success lies in the accuracy of the high-level picture it draws and on the strength of the predictions it can make about legal change, not in how precisely it depicts the moving parts.⁸⁵

⁸¹ To calculate the optimal course of action under any state of the law, you have to know how other relevant actors will act. Knowing that they will act according to the same rationality as you, however, requires knowing that they know how you will choose your course of action. If they didn’t, they might act differently, and you would have to amend your calculations. But for them to know how you will choose your course of action requires them to know that you know. The infinite regress implied here is captured by the concept of ‘common knowledge.’

⁸² By ‘nominally indeterminate’ I mean that whether an individual’s behaviour has to be included in a litigant’s calculation depends on a provisional assessment of whether they are at all likely to participate. There are sure to be borderline cases. This is equivalent to saying that the calculation has to integrate the possible ‘activity’ levels of the whole population, with the caveat that for some portion of the population the only possible activity level is zero.

⁸³ See above, n 70, on the differential equations underlying the modelled calculation of courses of action. With a multiplicity of actors, the complexity of equations and the calculations involved would increase exponentially.

⁸⁴ In short, the map is not the territory and our maps are only useful insofar as they engage in some amount of reductionism. For critical explorations of this point, see Boaventura de Sousa Santos, ‘Law: A Map of Misreading. Toward a Postmodern Conception of Law’ (1987) 14 J L & Soc 279; Brian Langille, ‘Putting International Labour Law on the (Right) Map’ in Adelle Blackett and Christian Lévesque (eds), *Social Regionalism in the Global Economy* (Routledge 2011).

⁸⁵ Milton Friedman, ‘The Methodology of Positive Economics’ in *Essays in Positive Economics* (University of Chicago Press 1953).

Here, I want to bring to bear Herbert Simon's incisive argument that Friedman's defence of unrealistic assumptions only makes sense where there is sufficient *continuity of approximation*.⁸⁶ Simon's argument was a response to defenders of Friedman's position who drew a parallel with the reliance on unrealistic assumptions in physics. We know, for example, that because of general relativity, Newton's physical laws describing the action of gravity are strictly speaking false. Any model of the movement of the planets built atop Newtonian assumptions are sure to be false as well. Nonetheless, scientists and engineers often employ a methodological posture that allows them to make a logical jump from ideal types to empirical fact. That posture, which Simon named the 'principle of continuity of approximation,' simply entails the supposition that, where a model's assumptions sufficiently approximate real-world conditions, any claims logically derivable from those assumptions will be approximately correct as well.⁸⁷ Where the principle is valid, exploiting it can be an extremely valuable technique. It limits the complexity of calculations, reduces the numbers of factors that need to be considered, and decreases the necessary precision of measurements.

Simon's argument was that this 'principle' was a common feature of the modern scientific toolkit. He did not say anything about when it could be trusted or relied upon. In practice, we can treat continuity of approximation as an empirical relationship, measurable in degrees, between a particular phenomenon and a particular model used to capture it: that is, a model's approximation of the reality can be more or less *continuous*. Notably, continuity of approximation is not an internal feature of a model, but strongly depends on how the model is to be used and especially on the scale and scope of the phenomena it is trying to capture. For example, the ideal gas laws provide very accurate descriptions of the macro-behaviour of compressed gases. Those laws are deducible from very simple premises about the behaviour of and interaction between individual molecules. Thus, for the purposes of modelling the behaviour of a gas, this simple model of molecule behaviour has very high continuity of approximation. Yet the model is not 'sufficiently

⁸⁶ Herbert Simon, 'Testability and Approximation' in Daniel M Hausman (ed), *The Philosophy of Economics: An Anthology* (3rd edn, Cambridge University Press 2008); the text originally appeared in GC Archibald and others, 'Problems of Methodology—Discussion' (1963) 53 *The American Economic Review* 227, 229–31.

⁸⁷ Simon named his concept by analogy to the concept of *continuity* in mathematics. A continuous function can be rigorously defined as a function for which input values that are close to one another always produce output values that are close to one another as well, so long as the inputs are sufficiently close. What Simon had in mind is that a model has continuity of approximation so long as 'good' approximations at the micro level (inputs) produce 'good' approximations at the macro level (outputs).

approximate' to come even close to correctness in predictions about the behaviour of individual molecules.

Much can be said about the factors that determine continuity of approximation between a system and some model of it. For one, as with the ideal gas laws, a great deal of leverage can be exercised by the statistical law of averages. Where a model aggregates over a large number of individual bodies, small differences between the actual behaviour of the individuals and model's assumptions about their behaviour will not matter so long as the differences are randomly and symmetrically distributed. More generally, we can surmise that continuity of approximation will be stronger when the gaps between assumptions and reality are small, non-systematic, or non-cumulative. This idea that gaps and inaccuracies between assumptions and reality, even very significant ones, will in a sense 'come out in the wash' was the basis of early defences of the efficient financial markets hypothesis.⁸⁸ Gary Becker, too, provided a compelling explanation of how market rationality, defined in terms of negatively inclined demand curves, could arise just as easily from wholly irrational choices on the part of individual consumers as from rational ones, using an argument he explicitly compared to the ideal gas example.⁸⁹

F. Strategic Action and the Instability of Legal Form

When it comes to some of the assumptions underpinning the Landes–Posner model, there is a plausible argument that continuity of approximation is satisfied. I offer four examples. Though common knowledge of rationality does not hold, neither can anyone expect others to conduct themselves in completely altruistic ways. Individuals do not solve multi-variable differential equations when they choose how to proceed in a legal dispute, but when the stakes are relatively small for a party, the outputs of those calculations may not have any functional consequence for their behaviour anyway.⁹⁰ When the stakes are large, by contrast, the outputs of the kinds of calculations suggested by the Landes–Posner models may map rather well onto simple intuitions. People do not have full

⁸⁸ Eugene F Fama, 'Efficient Capital Markets: A Review of Theory and Empirical Work' (1970) 25 *Journal of Finance* 383; Andrew W Lo, 'Efficient Markets Hypothesis' in Steven N Durlauf and Lawrence E Blume (eds), *The New Palgrave Dictionary of Economics* (2nd edn, Nature Publishing Group 2008).

⁸⁹ Gary S Becker, 'Irrational Behavior and Economic Theory' (1962) 70 *Journal of Political Economy* 1; see Cosma Shalizi, 'Of Microfoundations (In Memoriam Gary Becker)' (*Three-Toed Sloth*, 7 September 2018) <bactra.org/weblog/1155.html> accessed 1 November 2018.

⁹⁰ If the future stakes of a case for a litigant are small, then they need not consider the future activity of others under the law when choosing how to proceed in a legal dispute. The differential equation they are imagined to be solving is mostly zeros.

knowledge of each other's preferences, but if litigants all have a rough sense of how others will respond to new laws, it may be sufficient for the high-level structure of the model to fit the real-world dynamics. The goal of the Landes–Posner model is to map out the rough shape of the curve that legal change follows under various scenarios, not to develop a technique that is precise enough for numerical prediction.

Unfortunately, our fuller picture of the assumptions and presuppositions underlying the Landes–Posner model does point to one way in which continuity of approximation fails catastrophically. In the actual world regulated by law there *is* significant and persistent controversy about what counts as an activity for the purposes of a rule, and about whether an adverse event has occurred.⁹¹ Parties to a legal dispute often disagree about whether they were engaged in an activity to which a rule applies, and about whether a legally salient adverse event has occurred. In negligence cases, for example, there may be a disagreement over whether the defendant actually owed a duty of care—that is, about whether the plaintiff and the defendant were engaged in a shared activity—or over whether the relevant standard of care has been breached. It is the determination of the answer to these questions which conditions whether or not, respectively, the parties were engaged in an activity, or an adverse event has occurred, for the purposes of Landes and Posner's model. Similarly, in contract, parties may disagree about whether they established a contract at all (shared activity?), or whether or not an agreement was breached (adverse event?). As a result, litigants trying to calculate the prospective cost consequences of some status quo ante legal rule cannot be confident that the population of potential future co-actors will agree with them about what rules are applicable to a given activity. Nor, vice versa, can they rely on agreement about what activities will fall under the rule. They cannot trust an agreement about whether an adverse event has occurred. Put more sharply, parties to a putative legal dispute may not even agree about whether there is a legal dispute.

Critically, such disagreements about the application of a rule are not random. The gap between model and reality is not small, unpredictable, or unsystematic. Given the economic consequences of the legal dispute, the rationality assumptions that underlie

⁹¹ A common claim about the legal system is that agreement about the application of a norm to a situation is much more common than disagreement. Looking only at legal disputes biases the picture. My claim that disagreements are rampant should not be interpreted to mean that they are necessarily more common than agreement.

Landes–Posner, and the Coasean approach more broadly, instead imply that disagreement will be systematic, substantial, and endemic. Defendants have a strong incentive to say ‘I am not the kind of party to which this rule applies,’ ‘They are not the kind of party that can avail themselves of this kind of claim,’ ‘The relevant kind of event never occurred,’ and the like. The alternative to doing so is exposure to potential economic loss. And without some way to stabilize the scope and application of a rule, the same sort of strategic behaviour will be available to potential plaintiffs as well. In the absence of some systemic constraint, actors will always have an incentive to claim that some event impinging on their interests has occurred and that they have not only endured a loss but suffered some wrong for which some other actor(s) should compensate them.

Such incentives are not immediately fatal to the validity of the Posner–Landes model. Recuperating the model in the presence of such disagreement, however, requires the identification of some factor, process, or actor that is capable of resolving disagreements of this sort for the purposes of an individual dispute. More seriously, it will require a factor that can provide a relatively stable and moderately consistent marker of how such disagreements would be resolved were a dispute to be mooted by parties of one type or another. Put differently, the kinds of calculations that are central to the Landes–Posner model of decision-making in legal disputes and in the economy more generally depend on processes that work to mark off the boundaries of rule-relevant activities and adverse events in a relatively stable, foreseeable way.

We can hypothesize a number of ways in which such potential disagreements might be subjected to stable resolution. We can contemplate a system in which rules would be delimited by common-sense understandings of familiar categories. There would be one rule applicable when a car collides with a pedestrian, another for when someone vows that she will do something, and another applicable to the personal business transactions of the director of a corporation. Or we could envision a system in which the boundaries of the activity were themselves delimited through scientific and/or social scientific authority, based in turn either on inductive or instrumentalist reasoning.⁹²

⁹² I do not have in mind here a practice like the familiar economic analysis of law, which makes normative arguments and offers functionalist explanations regarding the desirable/actual allocation of rights, duties, and liabilities. Instead, I have in mind a practice that would use non-legal expertise to define the extension and intension of legally-salient categories, an instrumental application of the kind of functional explanation that Miceli gives for the boundaries that demarcate tort from property and contract, and contract from

I offer these hypotheticals only to avoid rushing into a conclusion that stable resolutions to such disagreements must be achieved through law. I severely doubt that trying to deal with them wholly outside the legal system would be possible.⁹³ My intuition is that an appeal to common sense would transform the problem of self-interested knowledge in name, but not in substance.⁹⁴ In practice, of course, such disagreements are generally resolved through the legal process itself and the actuality is that law itself provides the stable markers of the activities, actors, and events to which rules are applicable.

The legal system provides these categories with institutional stability, but it does not provide them with permanence. Law may stabilize and disseminate its understanding of the contexts to which legal norms are applicable, but that does not take meaning out of play—quite the opposite in fact. In some negligence cases, for example, the parties may each advance an argument before the judge which is expressed in terms of whether a norm *should* be applicable or in terms of who should bear the cost. But more often, the arguments are phrased in terms of whether the defendant actually owed a duty of care (shared activity) or in terms of whether the relevant standard of care has been breached (adverse event).⁹⁵ Hart and Fuller’s famous debate over what counts as a vehicle for the purposes of regulating a public park may have seemed to be a debate with very little at

property. Miceli’s account proceeds by imagining that ‘property rules’ or ‘liability rules,’ as defined by Calabresi and Melamed, end up being applied to goods, resources, assets, and relations on the basis of an efficiency benchmark. Thomas J Miceli, ‘The Color of Law: An Economic Theory of Legal Boundaries’ (2014) 38 *Eur J Law Econ* 185; Guido Calabresi and A Douglas Melamed, ‘Property Rules, Liability Rules, and Inalienability: One View of the Cathedral’ (1971–72) 85 *Harv L Rev* 1089.

⁹³ There is certainly some division of labour in such tasks. Elizabeth Mertz (ed), *The Role of Social Science in Law* (Ashgate 2008); Lawrence Solan, ‘Can the Legal System Use Experts on Meaning?’ (1999) 66 *Tenn L Rev* 1166.

⁹⁴ cf Schlag:

Suppose you are a judge. And suppose in that capacity you are asking, ‘What does the term “vehicle” really mean?’ Now again, you can ask what the word means to most people. (But you are not taking a poll.) You can ask what expert linguists believe the word means. (But you are not asking to follow the best expertise.) You can ask who among the litigants has the best argument about what the word means. (But you are not judging a debate round.) You can ask the city council members what they meant by the term ‘vehicle.’ (But they are not deities and you are not an oracle.)

Pierre Schlag, ‘No Vehicles in the Park’ (1999–2000) 23 *Seattle U L Rev* 381, 386.

⁹⁵ In the American context, the Hand rule or Hand formula, expressed by Judge Learned Hand in *Carroll Towing*, is often taken by law-and-economics scholars as evidence of the centrality of instrumental, economistic reasoning in American private law. *United States v Carroll Towing Co* 159 F2d 169 (United States Second Circuit 1947). Feldman and Kim say the rule has been ‘canonized’ by law and economics. Allan M Feldman and Jeonghyun Kim, ‘The Hand Rule and *United States v. Carroll Towing Co.* Reconsidered’ (2005) 7 *Am Law Econ Rev* 523, 523. The actual state of negligence law across the United States, however, at least as reflected in instructions to juries, is at best consistent with the Hand rule, not dictated by it. In particular, actual decisions generally depart from economic interpretations of the rule. Mark A Geistfeld, ‘The Principle of Misalignment: Duty, Damages, and the Nature of Tort Liability’ (2011) 121 *Yale LJ* 142, 151–52. It is hard to imagine that the normative, instrumental standard of adjudication does better in areas of law that are not ‘canonical’ for the economic view.

stake,⁹⁶ yet the majority of legal cases are determined precisely by these sorts of questions: not ‘should vehicles be prohibited?’ or ‘who should bear the costs?’ and the like, but a type that looks like ‘Is this a vehicle?’ and ‘Is this the type of person who is subject to such liability?’

The difference this makes for the Coasean approach is not immediately obvious, but it is profound. Why does it matter whether a case is decided on the basis of ‘should this person be liable?’ or ‘did this person violate the standard of care?’ The direct gains and losses for the parties are determined by a judge’s holding, not the content of her reasoning. That may be true, as far as it goes, but it does not go far enough. It does not remember what is at stake for the parties beyond the payoffs in the instant dispute, nor for actors beyond the dispute, namely, how the case weighs on the overlapping network of rules that cover the field of economic activity. This issue forces a confrontation with the reality that a body of precedent is not just a weighted collection of prior statements about whether a norm should be applied in a given context, that judges apply according to some abstract probability function. Rather, the body of law germane to a legal dispute is a body of overlapping, inexact, and often conflicting statements about the nature of the contexts—the actors, the activities and the events—to which one or more norms might apply. And legal change thus entails not only small, marginal changes in the probability of an adverse event being subject to a given quantum of liability, but small changes to the map between the body of norms and the contexts to which they apply. Any account of legal change rooted in positivism and emergent processes must include not only an account of the transformation of norms, but the transformation of legal form as well.

IV. Conclusion

I end with a number of comments. Let me start by momentarily returning to the evolutionary idiom, restating the conclusion of Part III in terms of mechanism and unit.

I suggested at the end of Chapter 2 that the Coasean framework might provide a serviceable proxy for an as-yet unconstructed evolutionary account of legal change, which would integrate a sufficient number of factors and a rich enough account of

⁹⁶ HLA Hart, ‘Positivism and the Separation of Law and Morals’ (1958) 71 Harv L Rev 593, 607; Lon L Fuller, ‘Positivism and Fidelity to Law: A Reply to Professor Hart’ (1958) 71 Harv L Rev 630, 663; Schlag (n 94) 383.

mechanisms to be applicable across a wide variety of contexts. I suggested, in particular, that the framework might be made to stand in for a more general account that would still be constructed on the basis of countervailing preferences, institutional structure, and legally-constrained behaviour. If there were particular problems with the details of the Coasean account of behaviour, preferences, institutional constraint, or legal form my operating premise was that they could be patched up with sufficient improvement to the account of motivations, behaviours, institutions or normativity.

The problem which appears in this chapter is that being interested in the evolution of norms forces us to confront the interaction between their reproduction over time and the reproduction of the contexts to which they apply. Taking that relation into account, however, further requires acknowledgement that both types of entities must be under what a Darwinian perspective would call selection pressures. A robust account must not only integrate an account of how both kinds of entity change, but an account of how they are kept relatively stable over time.

In Chapter 4, I will explore one strategy, elaborated in the work of Simon Deakin, who addresses these rather profound difficulties with interest-based accounts of legal change. Deakin's strategy involves going beyond the vague, instrumental references to evolution that were discussed in the last chapter. He combs evolutionary theory for insights, guided by an intuition that the interplay of continuity and change in the domain of life might reveal something about similar dialectics in the dynamics of law.

Second, I should acknowledge that the argument I developed in Part III of this chapter can likely be made without having to draw on evolutionary theory. Having discovered these concerns through a careful application of evolutionary theory, however, my investigations have clearly pointed to the role that evolutionary models can play in elucidating aspects of legal (and social) change that other approaches take as givens, and whose stability is taken for granted. On the other hand, it may well be that the criteria for an evolutionary account of legal change, as I laid out in Chapter 1, can be met without drawing on evolutionary theory in the ways that Deakin does, or even at all.

The final point emphasized by this chapter is that drawing on evolutionary theory alone cannot be expected to be sufficient to develop believable models of legal change. There is no codex to tell researchers which elements of evolutionary theory may be relevant or apt, or what uses might be productive. We can map legal change onto evolutionary theory,

but we have to come up with our own legend. We must also be aware that Darwin's algorithm might mislead us entirely.

4 — Legal Change between Systemic Evolution and Institutional Adaptation

If a judge were to hear a case concerning damages to a broken vase, he would have little success if he looked up 'vase' in the statute.

—Niklas Luhmann¹

... the law is merely observing its own operations, imagining all the while that the economy functions in such and such a way.

—Gunther Teubner²

Through a series of books, articles, and chapters published since the turn of the century, Simon Deakin and his collaborators have developed an account of legal change that is evolutionary in its methodological aspirations, in its theoretical inspirations and, often, in its principal motif.³ This chapter synthesises and critiques that account. While the focus is on Deakin's work, this chapter serves as more than an isolated episode in the recent history of legal theorizing. I take Deakin's scholarship as exemplary—paradigmatic—along a number of dimensions that are relevant to the larger arc of my argument.

Though the last chapter was largely staged in terms of the pitfalls and promises of evolutionary theory for evolutionary accounts of legal change, the product of that discussion was a clear insight into how legal knowledge matters for legal change. Investment in the complexities of evolutionary theory generates questions that expand our attentions beyond norms, and toward the broader significance of a legal rule. The chapter's findings implied that an empirically sound, nomothetic theory of legal change

¹ Niklas Luhmann, *Law as a Social System* (Fatima Kastner and others eds, Klaus A Ziegert tr, Oxford University Press 2004) 340.

² Gunther Teubner, *Law as an Autopoietic System* (Zenon Bankowski ed, Anne Bankowska and Ruth Adler trs, Blackwell 1993) 77.

³ Notable collaborators include Frank Wilkinson, John Armour, Priya Lele, Matthias Siems, Katharina Pistor and Geoffrey Hodgson. For ease of reference, however, the relevant sources are cited when their content is first addressed or drawn from. See the bibliography for further details.

would have to extend consideration beyond the law's entanglement with norms, behaviour, interests, and institutions, to comprehend the role of law and the legal system in the maintenance of the semantic order to which norms apply. More explicitly, the conclusions showed that a (scientific) evolutionary account of legal change must integrate appreciation both of how norms change and of the shifting, contested beliefs about the contexts to which those norms apply. The argument did not however provide any indication of what such an account would look like.

In a sense, Deakin's research on legal evolution over the last twenty years has provided an answer to the questions raised by the last chapter. He aspired to develop a general account of legal change that appreciates both the pressure that interests place on norms, and the pressure that the legal system places on the legal forms through which those norms are necessarily administered.

The key, borrowed by Deakin from systems theory, is that neither individual norms nor even the legal classification of contexts that stabilize the application of those norms can be treated atomistically. His approach instead insists that norms and the *concepts* to which those norms are linked must be characterized as part of a holistic, 'operatively closed' legal system. The implication is that accounts of legal change cannot be limited to explaining the transformation of individual norms. They must instead track transformation of a linked complex of norms, concepts, and a broader legal discourse.

Part I is intended to provide a richer explication of Deakin's arguments. As his theory has been elaborated in texts written over the course of twenty years, there are unsurprisingly some tensions and contradictions between its versions. Nonetheless, my method in this part is one of synthesis and reconstruction, with the aim of placing Deakin's account on as strong a footing as possible. In particular, some significant portion of the argument is dedicated to clearing up common misconceptions about systems theory.

In Part III, I draw on empirical historical work Deakin has done in collaboration with Frank Wilkinson to raise a number of doubts about Deakin's approach to the 'environment' in which law evolves. In service of those arguments, Part II develops a partial critique of Deakin's theory.⁴ The output is clarification about Deakin's relationship

⁴ Critique here is used not in the sense of evaluating negatively, but of bringing to the surface what is otherwise opaque.

to functionalism (or adaptationism) discussed in Chapters 1 and 3 and illumination of a tension in Deakin's account of the role of 'politics' in processes of legal evolution.

I. A Reconstruction of Deakin's Legal Evolution: Institutional Economics, Systems Theory and the Darwinian Algorithm

The elemental claim of Deakin's approach to legal change is the following: '... an evolutionary study of law requires ... a dual approach: on the one hand, an internal understanding of internal juridical modes of thought and conceptualization; and on the other, an external perspective on the law as a social institution or mechanism.'⁵ In rough outline, he draws on 'autopoietic' systems theory in the tradition of Niklas Luhmann and Gunther Teubner to provide the former, and on a robust institutional economics to furnish the latter.⁶ However, underlying these borrowings, and working to knit them together, is a commitment to the idea that a robust understanding socio-legal change will be aided by reference to, and integration into, evolutionary theory.

Before I move into the details, I need to say a word about the strategy I adopt in this chapter and how it relates to the problem of knowledge, and to make a crucial clarification about uses of the 'internal/external' dichotomy when it comes to law.

A. Taking Knowledge Seriously

At the highest level of generality, Deakin describes his theory as an account of co-evolution between the legal system, the economy, and the political system.⁷ Co-evolution means that law's development is quasi-autonomous, with the economy serving only as one, albeit important element of the environment in which that development occurs.⁸ Law, as experienced and expressed through the legal rules communicated and enforced by legal institutions, determines neither the structure of social relations nor more abstract 'outcomes.' Nor, vice versa, is the path of legal change determined by changes to economic context. The influences are multi-linear.⁹ Law is shaped by the social context it

⁵ Simon Deakin and Frank Wilkinson, *The Law of the Labour Market: Industrialization, Employment, and Legal Evolution* (Oxford University Press 2005) 28–29.

⁶ Simon Deakin, 'Legal Evolution: Integrating Economic and Systemic Approaches' (2011) 7 Rev L & Econ 659, 673.

⁷ John Armour and others, 'Law and Financial Development: What We Are Learning from Time-Series Evidence' [2009] BYU L Rev 1435, 1449–50.

⁸ *ibid.*

⁹ Deakin and Wilkinson (n 5) 28–30.

operates within even as it shapes and guides relations and dynamics in that context.¹⁰ Though the legal system, the political system, and the economy each develop endogenously, each also acts as an important element of the external environment that shapes the (internal) evolution of the other two.¹¹ (see figure 1 below)

Figure 2. Coevolutionary model of the legal, economic and political systems

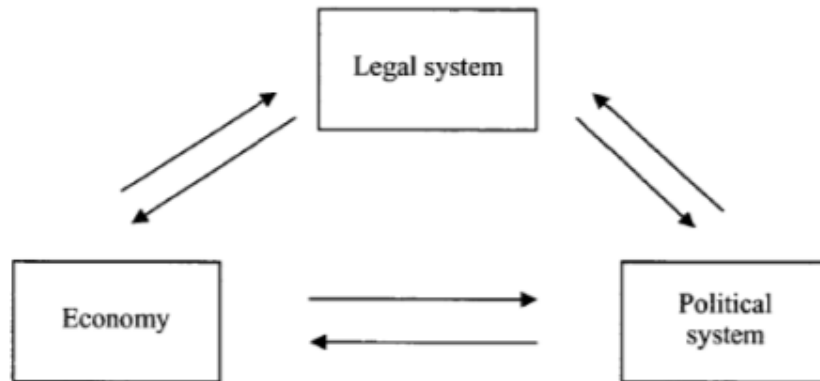


Figure 1: Deakin's macro-model of co-evolution between law and society¹²

In a sense, the whole thesis of this dissertation might be grasped by noting the absence, in this diagram, of knowledge. The initial impulse might be to characterize the project as something like supplementing the picture with a box labelled 'knowledge,' along with a complementary bevy of causal arrows.¹³ Analytically, that formula might have been worked out through a supplement to Deakin's account. It would have meant taking Deakin's account more or less for granted, analysing the nature of the 'knowledge system,' then providing an account of its coevolution, respectively, with the legal system and the economy.¹⁴

For a number of reasons, this analytical strategy is unlikely to bear fruit. Fundamentally, integrating new factors into a model is not like adding a new wing onto an existing house. Considering additional factors, or modelling a system with more elements, will often

¹⁰ *ibid* 28.

¹¹ Armour and others (n 7) 1450.

¹² *ibid*.

¹³ I presented early versions of my work using such a four-part diagram as an illustrative heuristic.

¹⁴ The resulting account would be prelude to an account that integrated attention to all four systems; as I note below, Deakin does not give robust attention to the complexities introduced by the political system, but focuses primarily on the interaction between legal norms and economic institutions.

completely supersede or annul the prior analysis. If you add a variable to a system of equations, the solutions developed for the simpler model will sometimes still work in a small, possibly redundant, set of cases. Sometimes, but seldom. The gravitational two body problem has an easy, closed-form solution; the generalized three body problem has none.

Luckily, we are not searching for a closed-form, universal model than can be used to predict the path of future legal change. The goal, as articulated in Chapter 1, is only a clear sense of the relevant mechanisms. In looking for a credible account of legal evolution, we are not looking for something like a closed-form solution to the gravitational force equations, but only for something akin to the equations themselves. Yet as much as our epistemological ambition may limit demands on the model, the details of Deakin's account introduce much knottier issues.

We are not simply looking, as with the 'three body' problem, to capture the interaction between discrete elements subject to a field of mutually-acting, high-level forces. In its details, Deakin's model comprises not only an account of how these systems relate to one another, but both i. how lower-level elements of each system are inter-related; and ii. how those elements are related to elements in the other systems.¹⁵ If I were to follow the line of inquiry suggested by the four-box figure, theory reconstruction would entail a robust accounting for a system of knowledge, simultaneously addressing relations between elements of that system—scientific facts? models? theories? paradigms? —and the relation of those elements to elements from the other systems.

The more fundamental complication is that, once you drill down to the level of the elements that compose the systems, it becomes clear that some forms of knowledge are *already* present in Deakin's model. He is clear that epistemic phenomena—meaning, communication and information—play a central role both in the internal development of the individual systems, and in the interactions between them. In Deakin's account of how legal rules impinge on economic behaviour, he puts the informational content of those rules in the foreground. The key function of legal norms, he proposes, is to signal to

¹⁵ A full account would not be limited to inter- and intra-system relations between elements. Lying in the background of Deakin's analysis, and occluded by the system-theoretic view, is that the legal system only serves its economic and political functions because it is embedded in a legal order, that is, an effective state apparatus that gives legal norms 'bite.' The 'signals' it sends are a credible indicator of state behaviour. Economic institutions depend not only on the particular information (norms, rulings) communicated by the legal system, but on the bare existence of the system as well.

economic actors about the ‘state of the game,’ and thereby facilitate (mutually advantageous) action in the presence of strategic uncertainty. In the opposite direction, he posits that legal forms, more than just reflecting a balance or admixture of economic interests, represent an archive of systemic learning about economic life. Finally, at least when it comes to the legal system, Deakin’s account sees knowledge—or at least meaning—as constitutive of the system and its elements.¹⁶

My intervention can thus not proceed by trying to make knowledge (belief, frames, expertise, etc) into an additional, previously un-examined set of elements in the environment in which law(s) develop. Instead, I proceed by providing a robust depiction of how knowledge enters into Deakin’s account of the economy, the legal system, and the relations between them. My contribution has to function as a corrective to those accounts, not just as a supplement to it.

B. On the Internal / External Distinction

As noted above, Deakin roughly divides his analysis into an internal account, comprehensible through systems theory, and an external view best understood using the tools of institutional economics. Yet there is a risk of confusion here given some conflicting uses of internal and external when it comes to law.

Describing systems theory as an ‘internal view’ of law would not pass uncontroversially with most jurists. To the great majority of jurists, Luhmann and Teubner’s accounts of law are unfamiliar, alien, or even outlandish.¹⁷ Deakin suggests that systems theory combines ‘external points of reference’—metaphors and concepts from outside of legal discourse broadly conceived—with an interpretive frame ‘which views legal phenomena from within the system itself, that is to say, through the internal processes, symbols and linguistic structures of law.’¹⁸ It is clearly this latter aspect, that systems theory takes seriously law’s own discourse, including law’s account of itself, which ultimately makes

¹⁶ Beyond their approach to the legal system, Luhmann and Teubner also understand the economy and the political order as communicative systems. Deakin has never been explicit about the degree to which he agrees with these views. Notably, he does not draw from Luhmann’s own economic sociology but instead combines system-theoretical approaches to law with institutional and epistemic evolutionary economics. His account of economic relations has an undeniable epistemic dimension but, in accordance with game-theoretical tools, he tends to treat interests, incentives, and behaviours as real in a more material sense—as determined and readable without intermediation.

¹⁷ Anthony Beck, ‘Is Law an Autopoietic System? Review of Law as an Autopoietic System’ (1994) 14 OJLS 401; MBW Sinclair, ‘Autopoiesis: Who Needs It’ (1992–93) 16 Legal Stud F 81.

¹⁸ Deakin, ‘Legal Evolution’ (n 6) 674.

it appropriate as the foundation of a 'social ontology of law.'¹⁹ Deakin does not mean that systems theory *is* an internal account of law, only that it is a perspective which understands law to have an interior, and thus does not reduce law to (an effect or epiphenomenon of) some other social reality.²⁰

Luhmann's elaboration of his own views on this tension is more explicit about the distinction between ontology and epistemology. He is unequivocal that, per the contrast between internal and external or, alternatively, between juristic and sociological modes of 'observing' law, his theory lies squarely in the latter.²¹ He takes it for granted that the elementary task of any sociological account of law must necessarily be a clear definition or description (he uses the term 'constitution') of the object 'law.' Though law may lack a 'nature' or 'essence,' the ability to clearly distinguish the boundary between law and non-law, Luhmann suggests, is a precondition of any scientific theory of law.²² No matter how grounded his account may be in constructivist, hermeneutic social theory, he is resolute that the boundaries of the object called law are determined by the object itself and are not a product or effect of the analytical grid used to observe it.²³ At least, this is true for what he calls the 'second order' observer—the scientist like him.²⁴ Yet he simultaneously understands that law, as an epistemic phenomenon, is wholly constituted out of 'first order' self-observations and self-descriptions, that is to say, by what the legal system or its participants take to be law. We might say that the second order observer has to understand law as an object that is ontologically constituted out of the epistemic practices of participants in the system.²⁵ As such, he emphasizes that an adequate external view—any theory of law that seeks to describe not only law but its social effects, functions, etc—would necessarily have to account not only for the ways in which valid law produces itself, but also for the effects of law's accounts of itself.²⁶

¹⁹ Simon Deakin, 'Evolution for Our Time: A Theory of Legal Memetics' (2002) 55 CLP 1, 33–34.

²⁰ *ibid* 33.

²¹ Luhmann (n 1) 59.

²² *ibid* 57.

²³ *ibid* 57–58.

²⁴ *ibid* 58.

²⁵ Luhmann would no doubt insist on an account that speaks only of communications within the system, rather than the actions of participants.

²⁶ Luhmann (n 1) 59–60.

C. Internal Dimension of Legal Evolution: Insights from Systems Theory

Having dispensed with those preliminaries, I now turn in earnest to the meat of Deakin's account of legal evolution. I begin with a review of the systems theory on which he bases his account of law's internal dynamics, then turn to his account of evolutionary forces, and conclude with his model of the economic 'environment' that exercises evolutionary pressure on the legal system.

1. Socio-Legal Evolution as Co -Evolution of 'Closed' Systems

When Luhmann and Teubner speak of 'the legal system,' they use that term (like many others) in a sociologically precise sense. Deakin nominally subscribes to Luhmann's account of society as an *operatively closed* or *autopoietic* system, with a variety of subsystems.²⁷ Where biological systems (individual bacteria, or trees, or dogs) are made up of physical matter, the basic constituents of social systems are 'communications.'²⁸ *Communications* differ from the human behaviours that are at the foundation of many social scientific projects in two ways. First, the term is intended to capture the fundamentally semantic dimension of human action. Unlike a model of behaviour that is limited to (individual) preferences, beliefs, and strategic decisions, the systems theory approach understands social practices as intrinsically informed by, and expressive of, meaning. Second, this attention to communication rather than behaviours stresses the social agency of various non-human actors. The social world is rife with artefacts—a term used here to comprise both physical objects like traffic lights, and texts that can persist and exist across a variety of physical forms. Those artefacts serve to coordinate (or *choreograph*) practices by expressing a meaning that will be (roughly) shared within a discursive community.²⁹

²⁷ Earlier versions of Deakin's theory depended only on Teubner, who has clear intellectual debts to Luhmann, but whose approach is distinct in a number of ways. Notably, Luhmann's *Law as a Social System* was not published in English translation until 2004. There is no cited reference to Luhmann in Deakin's first major contribution to evolutionary accounts of legal change, Deakin, 'Evolution for Our Time' (n 19). There are only three references to Luhmann's work in Deakin and Wilkinson (n 5). Deakin's later work has relied more directly on Luhmann's approach, eg Deakin, 'Legal Evolution' (n 6); Simon Deakin, 'Juridical Ontology: The Evolution of Legal Form' (2015) 40 *Historical Social Research* 170.

²⁸ Deakin, 'Juridical Ontology' (n 27) 175.

²⁹ *ibid.* This emphasis on the agency of non-human actors, and especially of texts, creates some important and generally unacknowledged overlaps between Luhmann's systems theory and actor-network theory. See for example, Latour and Callon's argument that macro-actors such as states or corporations are possible among humans but not baboons precisely because of their reliance on various 'materials' with durability that exceeds the relationships between individuals—texts, walls, ranks, titles and uniforms, weapons, as well as on professionals trained to use them. Michel Callon and Bruno Latour, 'Unscrewing the

The legal system is one of many *subsystems* of the social system. To say that the legal system is a subsystem of the social system is to claim, first, that the constituent elements of the legal system are a subset of the elements of the social system, namely, meaningful communications.³⁰ Second, it means that the legal system is itself a social system, with a clear distinction between its own inside and outside.

Casting communications as the constitutive elements of social systems creates a number of traps for the unwary reader. Part of the difficulty likely lies in the specialized use of familiar terminology. Quotidian uses of communication have an instantaneous—or contemporaneous—temporal structure: it implies a sender, receiver, and a message with a determinate content, all present at the same moment.³¹ It is impossible to imagine communications in this sense being organized into a system. The image instead might be the notorious brain in a vat, babbling to itself without end, or a boiling pot of words and phrases. These images are erroneous, because they ignore the capacity of elements to be organized into structures. A single-celled organism is composed of molecules, but nonetheless contains structures that facilitate its reproduction over time.³² Likewise, a legal system may be said to have communications as its constitutive elements but nonetheless contain internal structures. In contrast to the physical elements of living creatures, we are unused to thinking of communications as durable or persistent. The legal system has structure(s)—norms, concepts—that help to perpetuate the distinction between legal communications and non-legal communications.³³

Systems theory seeks to account for the fact that legal institutions are less than fully accommodating (not fully responsive, not fully sympathetic) to social adversity, economic conflict, or political action. Though their account is ‘functionalist’ at the level of systems, it does not fall into the traps of functionalism, or adaptationism, discussed in Chapter 3.³⁴ The *existence* of the legal system, according to their account, may be the

Big Leviathan: How Actors Macrostructure Reality and How Sociologists Help Them to Do So’ in AV Cicourel and K (Karin) Knorr-Cetina (eds), *Advances in Social Theory and Methodology: Toward an Integration of Micro- and Macro-Sociologies* (Routledge & Kegan Paul 1981).

³⁰ Luhmann (n 1) 73–74.

³¹ Beck (n 17) 409–10.

³² By reproduction here I mean continuing to exist by taking in nutrients and exuding waste, not producing descendants.

³³ Luhmann (n 1) 78–79.

³⁴ The degree to which Teubner and Deakin escape from the charge of functionalism is discussed below, nn 74–85.

result of a process of social evolution that has led to structural differentiation.³⁵ But beyond that general systemic function, they resist the idea that the content of law is determined by or reflective of specific social needs, and reject the idea that law's content can be explained by reference to any distinctively non-legal factor.³⁶

Luhmann and Teubner are clearly right that insofar as we are trying to identify 'where the action is' in the practice of law, we would do best to address ourselves to the conduct of a distinctive way of thinking, writing, speaking and looking at the world. What seems most important in Deakin's borrowing from systems theory is its portrayal of modern, Western law as a professional, quasi-official practice characterized by a distinctive *discourse* and a particular mode of *interpretation*.³⁷ I will say more about these two terms below. Let it suffice for the time being to note that lawyers *qua* the highly institutionalized, professional class who exercise a dominant role in the conduct of short-term conflict resolution, in the facilitation of long-term cooperation and in the design and application of regulatory instruments, arrange their practice as much around maintaining semantic contact with a distinctive body of interconnected meanings as with 'resolving problems.' Lawyers are defined not by any particular roles but by their capacity and commitment to fulfil those roles using legal materials and legal practices. Consider the degree to which preexisting law necessarily informs the drafting of any new legislation, how the negotiated resolution of disputes takes place in the shadow of adjudication through the courts, or how the administration of regulation takes place, too, in the shadow of past and future administrative and constitutional review. Consider as well how often these tasks are either performed or at least assisted by legal professionals who are steeped in the values of procedural regularity, trained to treat the law as a bounded, determinate thing, and committed to a principle of legality that demands similar norms be applied to similar situations.³⁸ Where Luhmann and Teubner (and thus Deakin) are certainly correct is in their emphasis on the importance of concepts and discourse in the life of law, and in the insistence that norms (rules, rights, and duties) are the least interesting part of law.³⁹

³⁵ See Luhmann (n 1) ch 6 ('The Evolution of Law').

³⁶ Deakin, 'Legal Evolution' (n 6) 674.

³⁷ *ibid.*

³⁸ Deakin and Wilkinson (n 5) 4–6.

³⁹ Luhmann (n 1) 339.

Law, understood in this way, *exists*. That is, law as a form of conduct persists over time, even though the details of the conduct may vary and, in particular, despite continual turnover in the population of individuals participating in that practice (plus lawyers becoming judges, plaintiffs etc).

2. Some Limits and Weaknesses

I believe it is possible, and have tried below, to translate the claims Deakin makes about legal practice, legal concepts, and legal discourse into terms that minimize his reliance on the systems-theoretical apparatus. The risk of translating Deakin's claims into terminology less informed by systems theory is that it will necessarily do some violence to his own account. The advantage is that translating in this way allows me to present my own findings as corrective of his theory rather than a refutation of it. My sense, based on his work with Wilkinson, is that my account actually accords better with his own sense of things.

Embracing systems theory means taking on board more than just a particular account of law's mode of existence. Luhmann and Teubner's account extensively develops a set of metaphors borrowed heavily from the study of biological systems and of self-regulating systems more generally. Law in their account is not just a self-perpetuating form of practice, but is more precisely a self-contained system—an entity. Their claim is not simply that the semantic, interpretative and cultural practices of law are *distinctive* and discernable as (more or less) legal, but also that law is *distinct*, as in separate. Like other distinct entities, law (the legal system) thus has an inside and an outside.⁴⁰ As an entity with an inside, the system is constituted not by practices but by communications; that system, too, is self-perpetuating. Luhmann speaks not in terms of practices but in terms of *operations*. In Luhmann and Teubner's account, the people engaged in these practices fully disappear: there is only a system of operations producing operations. 'The system' can learn about its environment. 'Operational closure' means that there is a clear and determinate distinction between internal operations and external ones.

My intuition is that Deakin's theory of legal evolution works just as well if we jettison some of the more extravagant claims of (social) systems theory. I focus instead on the

⁴⁰ We might admit that a decision, or a description or an expression, can be *more* or *less* legal, much as a light can be more or less yellow. But that does not mean that law has an inside and outside, any more than 'yellowness' does.

implications of law's existence as a self-perpetuating practice engaged in by people, for law's relationship between various transformations and agendas outside of it. That is a different task than trying to render everything in terms of communicative systems that, despite being 'cognitively open,' occasionally seem closed to observation by humans.

Is a legal system truly a system, in the sense of Luhmann and Teubner? Is it a 'cognitive order'⁴¹ that thinks for itself?⁴² My goal in this thesis is to mount a very narrow critique of Deakin's account, not to tackle the sociological validity of systems theory. My sense is that systems theory is the kind of totalizing epistemological frame that necessarily evades falsification. For every point I want to make, my intuition is that it might be possible to translate it back into systemic terms.

Nonetheless, relying on an account that frames legal change in terms of an 'operationally closed' legal system composed of 'internal operations' that are wholly self-referential, makes it harder to express the doubts at the heart of my thesis.⁴³

Let me identify two examples where drawing this distinction has analytical stakes. Borrowing from Luhmann and Teubner, Deakin suggests that the legal system receives information about its social context through familiar 'points of contact:' litigation and adjudication on the one hand, the legislative process on the other.⁴⁴ But the legal system, that is, the practices engaged in by individuals steeped in and committed to the historical corpus of legal meanings, is also shaped by the broader forms of knowledge those legal actors have. Deakin's account of the rise of the employment contract in the United Kingdom portrays a more porous boundary. One way of putting my claim might be to insist on a much more expansive idea of what counts as an input into the system.

3. Internal Aspects of Legal Evolution—Concepts, Discourse and Interpretation

With those preliminaries out of the way, let me now return to the distinctive *discourse* and associated mode of *interpretation* that work to constitute law as a stable (though obviously not immutable) practice (i.e. as a social system). As will be seen, most of my time will be spent with *concepts*. I start, however, with interpretation.

⁴¹ Deakin, 'Legal Evolution' (n 6) 673.

⁴² Gunther Teubner, 'How the Law Thinks: Toward a Constructivist Epistemology of Law' (1989) 23 Law & Soc'y Rev 727.

⁴³ See Deakin, 'Legal Evolution' (n 6) 674.

⁴⁴ *ibid* 674–75.

a) Interpretation

A car colliding with a pedestrian. A love affair—and the messiness of its end. The ruins of a house, collapsed during an earthquake. A rise in the cost of an input that means a company can no longer profitably deliver goods to a customer at the promised price. These are not legal entities or legal events. The systems view does not deny that these events have existence outside of law. It does not even suggest that these events *only* exist as communications in the social system. It is a starting point of the systemic view however, that, until events such as these are put into contact with the legal system, they have no *legal* existence, no legal meaning.

Interpretation, or translation, is a matter of making the world meaningful to the legal system. It is not enough for someone to write to a judge to tell them about their misfortune. To receive information from the environment, information has to be ‘coded’ into a form that is meaningful within the system.⁴⁵

b) Concepts

Interpretation is performed via legal concepts—although, as we shall see, the significance of legal concepts is not limited by their role in interpretation.

Some legal concepts correspond to terms that appear almost exclusively in legal discourse: *res ipsa loquitur*, *estoppel*, *remand*, and the like. Although some legal concepts are expressed using otherwise-antiquated words or phrases borrowed from a foreign language, many use words with a prominent and largely associated everyday significance. What distinguishes legal concepts (or juridical concepts), even when they appear under terms with vernacular meanings, or with usages specific to other specialized settings, is their idiosyncratic significance, and distinctive existence, within the operation of the law.⁴⁶ To say that juridical concepts have distinctive legal meanings is not to deny that a concept’s legal significance has important, second order social salience.⁴⁷ I also emphasize below that we need to attend to an inverse effect, the imprint of the vernacular on legal meanings. But it is certainly the case that a lawyer is doing something different when he mentions a ‘corporation,’ whether arguing in court, giving advice to a board of directors, or proposing amendments to draft legislation, than what an activist is doing

⁴⁵ *ibid* 674.

⁴⁶ Deakin, ‘Juridical Ontology’ (n 27) 170.

⁴⁷ *ibid* 181–82.

when she speaks to a reporter regarding the reasons for a planned protest against a 'corporation' that 'puts profits before people.'

For the purposes of the legal system, concepts *condense* information.⁴⁸ Deakin's use of *condense* combines two meanings, one that connects the present to the future and is connected to what legal concepts *are*, the other rooted in the link between the present and the past, and linked to what concepts can be used to *do*.⁴⁹ I start with the latter.

In their link to interpretation, concepts provide the schema by which information about the world is represented in the legal system.⁵⁰ Concepts function as heuristics. They are, in Luhmann's words, '*auxiliary tools* for ... dealing with legal cases.'⁵¹ On the one hand, concepts provide the language, or discourse, through which states of affairs become represented in the legal system. This characterization is too passive however. What Deakin has in mind is that concepts work to filter out legally-irrelevant details, while picking out relevant features of state of affairs. They provide a filter, 'the gateway for empirical data to enter the legal system.'⁵²

Concepts condense information, second, in the sense that they work as a repository of information about past states of affairs in which certain norms have been applicable. Concepts, according to this understanding, are not just a label that has been attached to a cluster of past contexts, but the repository itself, which 'form[s] an informational store or *cognitive resource*' for future use.⁵³ Concepts are not just an index—they do not just point to past states of affairs. They are, more specifically, a set of *descriptions* of past contexts. Legal concepts, in this sense, condense relevant information about past / preexisting applications of the law.

D. The Evolutionary Mechanism

When it comes to Deakin's account of the evolutionary mechanism, care is called for. His approach is best illuminated by working through a long excerpt which addresses the

⁴⁸ *ibid* 171–72.

⁴⁹ On the one hand, Deakin speaks to how concepts serve to shape information flowing into the legal system; on the other, he seems to mean that concepts allow empirical data to shape legal rules

⁵⁰ In reference to their role in interpretation, Deakin has used 'represent' and 'condense' as synonyms. Deakin, 'Juridical Ontology' (n 27) 171–72.

⁵¹ Luhmann (n 1) 340–41 (emphasis added).

⁵² Deakin, 'Juridical Ontology' (n 27) 176.

⁵³ Deakin, 'Legal Evolution' (n 6) 675.

implications of the systems-theoretical perspective for accounts of law's evolutionary character.

[Law's] evolutionary properties are the combined result of the closure or autonomy of the system, on the one hand, and the possibility of its structural coupling with related social systems, including the economy, on the other. Through its operational closure, the legal system internalizes the mechanisms of inheritance, variation, and selection. Legal reasoning, which is guided by the principle of internal consistency, supplies a basis upon which normative phenomena are stabilized (inheritance), while also providing for the adjustment of rules in the light of changing external circumstances. A legal device such as the doctrine of precedent, which is aimed at achieving consistency, simultaneously contains the basis for the modification of rules when new cases arise (variation). Precedent implies that like cases will be treated alike, and unlike cases differently from each other. Under these circumstances, 'evolutionary selection achieves a very specific form,' one in which new rules emerge from the matching of rules to cases and the scope for the modification of rules which arises when two cases are not alike. ... variations are channeled by the twin pressures on legal interpretation: to maintain the internal order of the system, on the one hand, while finding a way to process and translate the information received from the environment, for example through litigation over individual cases, on the other.⁵⁴

One apparent implication of this excerpt, that Deakin sees evolution as wholly internal to the legal system, is not corroborated by other parts of his argument. Teubner, who Deakin references here, does explicitly claim that an operatively closed legal system entirely subsumes the evolutionary mechanism: '[a]fter the emergence of autopoiesis, internal mechanisms *take over* the evolutionary functions.'⁵⁵ Teubner portrays a process in which new variants on existing legal norms may be 'triggered' by social conflicts or economic disputes (or by legislative process, or by innovation in doctrinal scholarship). He suggests that the key mechanism for the selection of valid norms from among these variants also lies within the legal system. It is not just that the forms of variation limited by the nature of the legal system (variations, to even be considered, must constitute [legal] 'communications' ...); but the 'main criteria for selection,' too, are 'whether the innovation fits in with the existing normative structures and whether it is compatible with legal

⁵⁴ *ibid* 675–76 (citations omitted).

⁵⁵ Teubner (n 2) 58 (emphasis added).

autopoiesis (the legal code).⁵⁶ Lastly, the reproduction and retention of norms is performed through various practices that perpetuate 'legal culture.'⁵⁷ Teubner is not lucid on this point, but his account includes both selection among (potential) variant norms within the trial process and subsequent selective retention of the communications produced through trials via the cultural outputs of jurists (doctrinal research, textbooks, etc).⁵⁸

Deakin's approach is not quite compatible with Teubner's: his account of legal evolution is not entirely internal.⁵⁹ Like Teubner, he casts the individual legal dispute as the critical moment of the evolutionary mechanism; he, too, sees it as a locus of contact between the legal system and the world, a moment in which the legal system is set up to find the fit between a given state of affairs and the corpus of previously decided cases. And in evolutionary terms, Deakin sees this moment, like Teubner, participating both in variation and in reproduction. On the one hand, a doctrine of precedent, interpreted not only as courts being bound by earlier decisions, but specifically as an embodiment of the principle that equal cases are to be judged equally and unequal cases unequally, participates in the reproduction of the 'rule,' in the sense that it adds to a chain of cases to which the rule is applicable.⁶⁰

The effort to bring a given state of affairs under some rule replicates the rule, while *confirming* the reasons on which it is founded.⁶¹ To put it in terms that depart from the systemic view, subsuming a state of affairs to a rule reproduces the epistemic practice of reading or coding states of affairs as equal for the purposes of the rule. Rules, concepts, and interpretations are thereby reproduced.

On the other hand, the effort to subsume a particular state of affairs under an existing rule—say simple negligence—also works as an engine of variation.⁶² 'It would be

⁵⁶ *ibid* 59.

⁵⁷ *ibid* 56–61.

⁵⁸ Teubner privileges the trial as the site of legal evolution. *ibid* 61–62.

⁵⁹ He has, however, occasionally followed Teubner in implying that judicial reasoning is the primary locus of evolutionary selection. See e.g. Deakin, 'Juridical Ontology' (n 27) 176–77.

⁶⁰ Luhmann (n 1) 255.

⁶¹ *ibid* 311, 328.

⁶² Escaping from systems theory into the nitty-gritty of actual legal practice and human behaviour for a moment, we can note that subsumption is a matter of degree. We know (who does?) that a car accident between strangers is not a matter addressable through the interpretative and conceptual apparatus of the corporate oppression remedy. Yet there are liminal cases where we (who?) know that negligence might be in question, even if a court finds that the defendant owes no (legal) duty of care, or that the relevant standard of care was in fact met in the circumstances.

misleading ... to think of variation as the random result of, for example, errors in the copying or replication of rules.⁶³ The states of affairs that give rise to legal disputes are infinite in their variety: at minimum, events happen at different times and, generally, involve different combinations of parties. Even the legal context that the Posnerians ostensibly chose for its relative simplicity, where what is at stake is the allocation of liability for an accident involving a driver and pedestrian, involves a long list of factors whose relevance, while not obvious, is not absolutely excludable, either—the specific location of the accident, the presence of third parties, the general location of the accident, or even what the driver had for breakfast that day. Variation in the legal system arises from the process of fitting a given complex of facts into the map of legal discourse, as the systemic demands for a stable discourse and a consistent practice of interpretation come into tension with the unavoidable differences between factual contexts. Even in the case that a state of affairs is found to fall under negligence, the result produces variation by adding a case with a slightly different complex of factors to the archive of prior cases, by adding to the collection of exempla that constitute the operative concepts, and, as a corollary, by shifting the practices of interpretation that fix the scope and domain of the rule.

When it comes to selection, however, Deakin suggests that the social and economic environment is the key factor. Legal rules are experienced by the economic system (or, Deakin might say, by economic actors) as indicators of the state of play in economic relations. Those rules will be challenged, whether through litigation or various forms of action directed to the legislative-political system, by actors who have an incentive to switch to a different state of play.⁶⁴ And, as with the models developed by the Posnerians,⁶⁵ the repeated challenge through litigation or intercession of legislation exercise selective pressures, ultimately determining the relative reproductive success of the resulting rules.⁶⁶

⁶³ Deakin, 'Legal Evolution' (n 6) 676; *contra* Michael S Fried, 'The Evolution of Legal Concepts: The Memetic Perspective' (1998–99) 39 *Jurimetrics* 291, 302–03, 306–08.

⁶⁴ As explored below in Parts II and III, Deakin's characterization of the relevant selective pressures in his more applied work are not limited to those rooted in the self-interest of actors with a stake in legal rules, but sometimes encompass activities driven by policy goals as well.

⁶⁵ Deakin directly cites Rubin and Priest's seminal papers.

⁶⁶ Deakin, 'Legal Evolution' (n 6) 676, 678.

E. External Aspects of Legal Evolution: Institutional Forms as Mechanisms of Selection

When it comes to thinking about the selection pressures that law's environment exercises on the legal system, Deakin begins by trying to think about the development of economic relations independently of law.⁶⁷

1. From Game Theory to Epistemic Game Theory

Deakin's primary reference point starts with economic actors attempting to engage in coordinated behaviour, under the assumption that each is motivated significantly or primarily by personal preferences rather than joint benefits. Trying to understand behaviour as an emergent outcome of this kind of interaction has been the bread and butter of (non-cooperative) game theory. For many situations, the dominant strategy for each participant, though individually rational, leads to a joint outcome that is inferior compared to the result of different strategy for all players. The most famous model of such non-cooperative games is the prisoner's dilemma. Even for repeated interactions, the Nash equilibrium of the prisoner's dilemma is dominated by the outcome that would be produced if each player pursued a different, individually 'irrational' strategy.

The starting point of Deakin's approach is that institutions can 'change the game.' From one perspective, institutions can be viewed as an external intervention that adjusts the incentives each player has to engage in each available strategy. In effect, this is equivalent to changing the parameters of the game. If we assume rational players, this change in parameters will influence each player's dominant strategy, thus transforming the Nash equilibrium of repeated play. Essentially, institutions can convert a game with an inefficient equilibrium into a game where both players have an incentive to choose the mutually beneficial strategy.

These models find their relevance for investigations of legal evolution once we raise the question of how such institutions arise, and how they are maintained. It is all well and good that different games generate different strategies, and that institutions can function to de facto replace one game with a preferable alternative. But without an account of the social origins and/or functioning of institutions, this claim amounts to no more than a reiteration of the desirability of cooperative solutions.

⁶⁷ This section relies heavily on Deakin, 'Legal Evolution' (n 6).

One strategy is found in models in evolutionary game theory, in which norms arise spontaneously from continued interaction over time. In a now well-known result, players with knowledge of past practice and an indeterminate horizon for repeated cooperation can fall into mutually-beneficial habits, even without a change in the formal payouts for the individual interactions. With a fixed number of interactions, the assumptions of hyper-rationality of both players mean that the advantages of being first to defect dooms any move toward by collaboration from the start. With indeterminate play, a strategy set becomes available that will maximize each player's capitalized earnings in the long term, even though it does not maximize their payoff for a given iteration of the game.⁶⁸ Using such models, 'institutions' could be understood as an emergent, endogenous state of play, with knowledge of prior strategies and the risks of future retaliation functioning indirectly as a mutual constraint on present behaviour.

Where does knowledge come in? Notably, for evolutionary game theory models, players not only have common knowledge of the payoff matrix, but also of the past strategies chosen by other players. Early models in evolutionary game theory turned out to be problematically fragile. These models, typical of modern economics, are built atop assumptions concerning both the rationality of the participants and their degree of shared knowledge, assumptions that cannot generally be expected to prevail in the real world. And it is not simply that the models fall short of realism about human motivations and decision-making; the models are sensitive to those assumptions, so that wherever those assumptions are not satisfied, their predicted outcomes simply do not hold.⁶⁹

A partial solution to these shortcomings is found in epistemic game theory.⁷⁰ What distinguishes epistemic game theory from both classical game theory and its evolutionary extensions, is not that its conclusions depend on assumptions about the knowledge of the players. Indeed, as ably shown in the work of Herbert Gintis, the reasoning in classical game theory has always depended on exacting assumptions about what each participant knows about the motives, interests, and rationality of the others; those assumptions have, however, been tacit rather than being stated outright. Rather, epistemic game theory is marked by the effort to explicitly integrate accounts of *what* and *how* individuals know

⁶⁸ *ibid* 666–67.

⁶⁹ *ibid* 667.

⁷⁰ *ibid* 668–69. Deakin draws primarily from Herbert Gintis, *The Bounds of Reason: Game Theory and the Unification of the Behavioral Sciences* (Princeton University Press 2009).

about the preferences, predispositions and knowledge of other actors into models of strategic decision making.⁷¹

2. Law as a Correlating Device

Though it is not obvious from its usual formulation, classical game theory depends not only on shared knowledge, but on common knowledge. Key results, in particular, not only depend on the rationality of each player, but on each player knowing that the other is rational, knowing that the other player knows that they know, and so on. Research in epistemic games theory has shown that coordination between players can occur with much less stringent epistemic conditions. All it requires is a relative concordance of beliefs based on some shared environmental cue.⁷²

In some cases, those environmental cues simply reflect past practice organized around an originally arbitrary choice: in a country where cars drive on the right, the original choice may have been arbitrary, and the practice is self-reinforcing based on reasonable inferences that other actors will continue doing what they have done in the past.⁷³

Formal modelling of such environmental cues has developed the idea of the correlating device. A typical example of the correlating device is that of traffic lights. We do not need know very much about other drivers, beyond their desire not to get in a collision and their access to the same information the traffic light is providing us. A green light does not provide certain information about what cross-traffic will do. But following its instructions has become a stable, optimal strategy in the presence of always partial, probabilistic information about what other drivers will do.

Deakin emphasises that law and other norms can function in the same way.

II. A Partial Critique: Deakin on Functionalism and Politics

A. Adaptationism, Equivalence Functionalism and Qualified Functionalism

Before getting to the meat of my intervention, it will be useful to do some groundwork, extending and categorizing some types of functionalism. We have already been exposed

⁷¹ For an illuminating summary of Gintis's key arguments in this regard, see Gintis (n 70) 248–49.

⁷² Deakin, 'Legal Evolution' (n 6) 667–69.

⁷³ *ibid* 667.

to Gordon's two concepts of functionalism.⁷⁴ The first tradition, drawing on function's connotations of use, value or purpose, is associated with an epistemological stance that explains and understands social institutions in terms of their capacity to address or solve social problems. Though the use of 'functionalism' to describe this posture stretches at least as far back as the structural functionalism of Parsons, the notion that legal institutions exist because they serve some *socially* valuable purpose was already well-established decades earlier, as reflected in the work of American jurist Oliver Wendell Holmes.⁷⁵ Beyond the legal realists, however, the idea that law exists because of what it achieves (rather than expressing some moral truth) can be found in Blackstone and even his precursors. On the side of sociology, Weber was at least to some degree a legal functionalist *avant la lettre*.

Gordon also introduced a more expansive concept of functionalism, however, one distinguished solely by the effort to explain law or other historical phenomena as responsive to, that is to say *a function of*, some other, primary processes or factors. Again, following Sinclair, I refer to this latter concept as adaptationism. Note that, as echoed in Sinclair's argument, to say that an institution or practice is *adaptive* does not exclude the possibility of it being deliberately designed to fit its circumstances, only that the (primary) circumstances in some sense determine its form or content.

Let me stick with functionalism in the more familiar sense. One of Gordon's key criticisms of functional explanations of law was the preponderance of evidence 'showing that social and economic conditions that are apparently similar in relevant respects have produced radically different legal responses.'⁷⁶ The thrust of Gordon's critique is that the existence of a multiplicity of legal responses to the same apparent conditions belies any claim that social conditions and the social problems they engender determine the form or content of legal rules.

Teubner argued that Gordon's critique was misplaced. Functionalism, he argued, does not need to be expressed in terms of bijective—one to one—determinism. Teubner's own position was what he called 'equivalence functionalism.' Under this approach, individual

⁷⁴ Chapter 3.

⁷⁵ Key readings on Holmes include Kunal Parker, 'The History of Experience: On the Historical Imagination of Oliver Wendell Holmes, Jr.' (2003) 26 *PoLAR: Political and Legal Anthropology Review* 60; Robert W Gordon, 'Holmes' *Common Law* as Legal and Social Science' (1982) 10 *Hofstra L Rev* 719.

⁷⁶ Robert W Gordon, 'Critical Legal Histories' (1984) 36 *Stan L Rev* 57, 75–81.

legal institutions or doctrines are seen not as the unique option available to meet some social need, but only as one alternative among an array of possible responses. What is necessary is only that law offer some response. Which response, Teubner argued, was attributable to historical contingency. Solutions to social problems are ‘functionally equivalent’ and the conceptual apparatus of Teubner's equivalence functionalism involves ‘comparison and evaluation of various alternative solutions to historical problems.’⁷⁷

Deakin has explicitly disavowed the adaptationist position. Indeed, in deriding the ‘neo-functionalism’ of the law-and-economics approaches to legal change examined in Chapter 2, he is specifically concerned with their embrace of the idea that laws are adapted to—as he put it, ‘dictated by’—economic requirements.⁷⁸ It is clear, however, that Deakin is willing to countenance some variant of functionalism, so long as it does not fall into the adaptationist trap. His book with Frank Wilkinson on the genealogy of the employment relationship in the UK, describes the analysis as a combination of functional and historical perspectives.⁷⁹ The result appears in the form of what he occasionally calls ‘qualified functionalism,’ ‘functionalism with an important qualification’ or, when the function in question is the efficiency of economic relations, ‘qualified efficiency.’⁸⁰

Among the potential qualifications of the strict functionalist position identified by Deakin are *lag*, *suboptimality* and *context*.

Contrary to positions which understand existing economic institutions as functional responses to present conditions, Deakin emphasises that institutional form, including legal rules, may be adapted to past environments rather than to present ones.⁸¹ As he puts it, ‘lag between conceptual evolution and changes in social values means that concepts often appear to be ill-suited to contemporary circumstances.’⁸²

⁷⁷ Teubner (n 2) 50–51.

⁷⁸ Deakin and Wilkinson (n 5) 28–29.

⁷⁹ *ibid* 4, 16.

⁸⁰ *ibid* 33–34, 282; Deakin, ‘Evolution for Our Time’ (n 19) 11, 12, 35; Simon Deakin and Fabio Carvalho, ‘System and Evolution in Corporate Governance’ in Peer Zumbansen and Galf-Peter Calliess (eds), *Law, Economics and Evolutionary Theory* (Edward Elgar 2011) 124. Comparable here is his claim that ‘[t]he autonomy of law qualifies the effectiveness of legal reform as an instrument of economic and social policy.’ Deakin, ‘Legal Evolution’ (n 6) 681.

⁸¹ See Deakin and Carvalho (n 80) 124–25; Deakin, ‘Evolution for Our Time’ (n 19) 35; Armour and others (n 7) 1451. He compares this qualification with the presence of ‘frozen accidents’ in evolutionary biology. Deakin, ‘Evolution for Our Time’ (n 19) 12–13.

⁸² Deakin, ‘Evolution for Our Time’ (n 19) 40.

Second, the autonomy of law makes it too hard for the system to get to what might otherwise be an optimal solution to a given problem. In discussing this issue, Deakin borrows the concepts of path dependency from economics, 'bricolage' from the social anthropologist Levi-Strauss, and 'exaptation' from evolutionary biologist Stephen Jay Gould. The basic premise here is that processes which generate new forms are unlikely to travel too far away from what already exists. If in product markets network effects and switching costs tend to lock in choices that may turn out not to be most efficient, in the assemblage of legal doctrines or regimes, processes must make do with existing legal materials and may end up short of what might, in an objective analysis, offer the best solution.⁸³

The third way in which the functionality of law has to be understood as qualified, according to Deakin, is that it depends on context. What counts as the optimal (or easiest or most obvious) solution to a social or economic problem may depend on the surrounding complex of institutions. There may be feedback, so that institutions or rules count as solutions to problems, but only conditional on the presence of other institutions that may themselves be contingent.⁸⁴ A key reference point for these ideas, at least when it comes to economic law, is the idea, commonly identified with the varieties of capitalism literature, that economic institutions are complementary.⁸⁵ Rather than the relative efficiency of individual rules or institutions being determinative, institutions are understood to work together to achieve the tasks necessary for a capitalist economy to function.⁸⁶

B. What Role for Politics?

Across the numerous texts in which Deakin has tackled historical transformations and socio-legal evolution, it is possible to pick out two distinct threads. There is the more prominent approach, explicitly articulated through his theoretical contributions and explored in depth in Part I above. That approach is exclusively focused on the interaction of legal norms and concepts with institutional forms subject to implied efficiency

⁸³ Deakin and Carvalho (n 80) 124–26; Deakin, 'Evolution for Our Time' (n 19) 10–13, 40.

⁸⁴ Deakin, 'Evolution for Our Time' (n 19) 35.

⁸⁵ Peter A Hall and David W Soskice (eds), *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage* (Oxford University Press 2001).

⁸⁶ Armour and others (n 7) 1451–52; Deakin, 'Legal Evolution' (n 6) 681. For additional discussion emphasizing the importance of context, see the comparative work in Deakin and Carvalho (n 80).

pressures.⁸⁷ As suggested by Figure 1, above, Deakin does identify the political system as an important site of co-evolution with the legal system and the economy. His analyses occasionally refer to the potential effects of political action on legal change as well.⁸⁸ Yet his more theoretical pieces give no extended consideration to the nature of politics, to the operation of the political system, or to how the interactions of the legal system with political processes differ from its interactions with economic institutions. And when it comes to historical and empirical explorations of the origin and transformation of corporate law, tort, and contract doctrines, the relevance of politics is mentioned but ultimately goes unexamined.⁸⁹ In each of these cases of private law doctrine, the analysis not only counts as an example of qualified functionalism, but fits squarely under a concept of qualified efficiency in particular.

The ambiguities on this front are well demonstrated by a section in Deakin and Wilkinson's book⁹⁰ dealing the rise of limited liability and the modern corporate form in the United Kingdom during the nineteenth century.⁹¹ The section is intended to show the inadequacy of institutional economics as an analytical toolkit. They emphasize that institutions are more than just 'the equilibrium outcome of a game,' because public, formal institutions of the state, and law above all, do not only regulate or reflect institutions and economic relations, but constitute them. In their short account of the rise of the modern limited liability corporation the efficient solution, initially blocked by a complex of 'legal obstacles' was eventually vindicated. Though they insist that 'there is no set of economic forces to which the law must conform,' and conclude 'it is difficult to see the enactment of corporate laws underpinning the business enterprise as an efficient response to economic needs' what this seems to mean in the final analysis, is that the autonomous evolution of law leads to solutions with that are pseudo-efficient, albeit with

⁸⁷ See e.g. Deakin, 'Legal Evolution' (n 6); Deakin, 'Evolution for Our Time' (n 19) 20–29; Deakin and Carvalho (n 80) 125–28.

⁸⁸ See e.g. Simon Deakin, 'The Contract of Employment: A Study in Legal Evolution' [2001] *Historical Studies in Industrial Relations* 1, 2, 4; Deakin, 'Evolution for Our Time' (n 19) 18, 40; Deakin, 'Legal Evolution' (n 6) 675, 676, 81; Deakin, 'Juridical Ontology' (n 27) 174, 175, 177.

⁸⁹ For tort, Deakin, 'Evolution for Our Time' (n 19) 11–14; for contract, *ibid* 20–29; Deakin, 'Legal Evolution' (n 6); for corporate/company law, Deakin and Carvalho (n 80) 124–28. Deakin does state that one provision in the (UK) Companies Act 2006 had some foundation in concerns, originating in the political system, tied to 'the role of employees within the corporate structure' and 'the stakeholder debate.' But these admissions are made only as part of a larger discussion of the central role of contract principles in the related legislative amendments. *ibid* 125–26.

⁹⁰ See text to note n 79.

⁹¹ The quotes and claims related in this paragraph appear at Deakin and Wilkinson (n 5) 4–13.

lag. They emphasize that the process is 'asynchronic' and 'far from ... smooth,' so that adaptation is gradual rather than a straight 'response.' They ultimately suggest however that 'a qualified use of functional logic,' with efficiency tacitly taken to be the relevant input variable, is the appropriate frame to explain the persistence of the modern corporate form.⁹²

Where Deakin addresses labour law doctrines, on the other hand, his treatment repeatedly touches on dynamics and interactions that might be described as political, though they are not always cast in those terms. In one pointed intervention, Deakin draws attention to the apparently central role played by the distribution of political power, as mediated by the extent of democratic franchise, in the evolution of labour laws. He takes those dynamics to be an especially illuminating factor in efforts to understand divergent trajectories of labour law in the European metropole and its colonial territories.⁹³ Largely, however, he does not discuss transformations in the legal structure of and regulatory approach to working relationships in expressly distributional terms. Instead, politics enters into his accounts of labour law's evolution in ways that also end up embracing the structure of qualified functionalism. (I elaborate on this claim below).

In sum, Deakin's approach to private law or economic law can be described as an exercise in qualified functionalism, with economic efficiency as the key functional determinant of the evolutionary process. In his approach to labour law, the accounts still cleave to a variety of qualified functionalism, but one in which politics plays a more central role. When it comes to trying to pick out and critique Deakin's approach to non-legal knowledge, it will be fruitful to treat these two cases separately. I begin with the latter, for which a more intensive analysis is needed before a meaningful critique is possible. The question of how courts alone may be affected by ideas is left for an example in Chapter 6.

III. The Role of Expertise in Legislation: The Case of the Contract of Employment

Deakin and Wilkinson's 2005 book provides a rich chronicle of labour market regulation in the United Kingdom, generally covering 1800 to the present and in many parts

⁹² *ibid* 33–34.

⁹³ Simon Deakin, 'Legal Origin, Juridical Form and Industrialization in Historical Perspective: The Case of the Employment Contract and the Joint-Stock Company' (2009) 7 *Socioecon Rev* 35, 53–54.

addressing historical precedents from as far back as the sixteenth century.⁹⁴ The book is an impressive exercise in legal history, with findings on the shifting and complex linkages tying dominant forms of wage-dependent labour⁹⁵ to structures of production and to the schema of juridical forms, network of norms, and systems of enforcement which together structure official governance practices. The narrative is explicitly framed as an example of the socio-legal co-evolution explored in Deakin's other work, with systems theory used as the primary frame to understand legal evolution, and institutional economics as the primary mode for explaining economics relations and interactions.⁹⁶ Here I want to draw on the details of their genealogy of the contract of employment in the United Kingdom to explore how politics modifies and complements accounts based on these two theoretical frames alone.

A. A Genealogy of the Contract of Employment

Today, the employee / independent contractor binary works as the *summa divisio* of the 'cognitive schema' used both to order the allocation of social insurance entitlements, and to structure rights and obligations between wage-dependent workers and those they work for. In rough outline, working relationships on one side of that divide are managed through general doctrines of contract and an assumption of self-insurance and personal savings; the other side is the province of labour and poverty law. Though a number of broad trends have recently challenged the adequacy of the employee model, the contract of employment still provides the dominant platform for both regulatory regimes. That conceptual matrix both helps to maintain a practical distinction between employees and the self-employed, and permeates the normative content of each form. Responding to previous historical narratives characterizing the contract of employment as the result of welfare-state values and regulations being inserted into a *laissez-faire*, contractual approach to the regulation of working relationship that prevailed during the nineteenth century, Deakin and Wilkinson provide ample evidence that today's model of working relationships, bound up with contractual tropes and premises—especially with the idea of mutuality of obligations—was only generalized, consolidated and made applicable to

⁹⁴ Deakin and Wilkinson (n 5).

⁹⁵ It is important when speaking of the modes of conceiving and governing *wage-dependent labour* to remember that the intended obverse is not modern self-employment or aristocratic exploitation, but subsistence labour, as done by peasants that primarily produce their own means of subsistence.

⁹⁶ Deakin and Wilkinson (n 5) ch 1.

the majority of wage-dependent work after 1946, and for reasons bound up with the rise of the welfare state, not in spite of it.⁹⁷

Period to 1800	
Servant	Worker (typically unmarried) engaged in service under a yearly hiring, entitled to payment in cash or in kind whether or not there was work during the period of the hiring, and with a right to a poor law settlement after the hiring ended
Labourer	Daily or casual manual worker in agriculture or the unregulated trades
Master, journeyman, apprentice	Worker in trades protected by guild regulation
Period from 1800 to 1875	
Servant	Manual worker in industry or agriculture under the disciplinary regime of the master and servant legislation, with little security or wages or employment
Employee	Clerical, managerial or professional worker outside the master-servant regime, with a degree of contractual income and employment security
Independent contractor	Independent artisan outside the scope of master and servant legislation
Period from 1875 to 1950	
Workman	Manual worker subject to the semi-disciplinary provisions of the Employers and Workmen Act 1875, increasingly protected as the period went on by collective bargaining, workmen's compensation and social insurance legislation
Employee	At the beginning of the period, a non-manual worker with managerial or professional status; by the end of the period, a wage or salary-dependent worker, either manual or non-manual
Self-employed	Independent worker not employed under a contract of employment

Figure 2- Legal Classifications of Work Relationships from the Eighteenth to the mid-Twentieth Century⁹⁸

Before getting to the pith of my intervention, I need to provide greater detail about the nature of the conceptual transformation chronicled by Deakin and Wilkinson. To clarify the interplay between the schema of categories applied to the management of work relations, the complex of factual presumptions connected to those categories, and the normative apparatus they carry, Deakin and Wilkinson reach back to the Statute of

⁹⁷ *ibid* ch 2.

⁹⁸ Taken from *ibid* 106.

Artificers and the Poor Relief Act, passed, respectively, in 1563 and 1601. My points can be made, however, by focusing on the nature of the transformations that took place between 1875 and 1950.

As indicated at a high level in Figure 2 (above), the majority of wage-dependent work in the late nineteenth and early nineteenth centuries was subject to the regulatory scheme set out in the 1875 Employers and Workmen Act. Despite being characterized as a regime of formal legal equality,⁹⁹ the structure of obligations and rights as administered under the Act largely dovetailed with the ‘hierarchical, disciplinary model of service’¹⁰⁰ that had prevailed under the eighteenth-century Master and Servant Acts. Though the new regime retreated from a criminal model, taking away the direct power of magistrates and courts to jail workers for abandoning their work, it still functioned to fully subordinate ‘servants’ to the authority of their masters, with the full and robust backing of the coercive power of the state.¹⁰¹ Contractual premises and principles did emerge as a central theme, however, in the regulation of a growing class of higher-income, higher-class salaried workers (already labelled as ‘employees’). Though much of the content of these ‘contracts’ was filled in by reference to custom rather than explicit agreement, the courts attributed to these relationships a substantial mutuality of obligation, so that employees were often able to e.g. use the courts to win payment of wages due, or to evade duties not entailed by the position for which they were hired.¹⁰² To the degree that a contractual model also started to become more relevant in construing the rights and duties of ‘workmen’ in the early twentieth century, the relevance of that approach soon lapsed as hiring practices moved functionally toward a regime of contract at will—a bare exchange of work performed for pay, with little admission of permanence on either side. Outside of industrial contexts subject to wide-scale collective bargaining, jurisprudence was left somewhat incoherent.¹⁰³

⁹⁹ The sitting Prime Minister, Benjamin Disraeli, praised the new legislation by claiming that ‘[f]or the first time in the history of this country the employer and the employed sit under equal laws.’ *ibid* 75.

¹⁰⁰ *ibid* 74.

¹⁰¹ The courts had powers that have never been part of the regulation of contract before or since: a discretionary and extraordinary power to dissolve the contract and apportion damages and wages; a power to order specific performance under penalty of forfeiture of a security; a power to imprison workers who did not pay damages assessed for breach of contract. Despite the nominal detachment of the regime from the criminal law, damage awards often amounted to disciplinary fines rather than being based on any contract law principle. Servants could not demand specific performance. *ibid* 75–78.

¹⁰² *ibid* 78–80.

¹⁰³ *ibid* 85–86.

The incipient social protection regimes, moreover, did not see the same loosening of the distinction between the two groups. If the statutory regime governing ‘workmen’ persisted in the hierarchical, disciplinary model inherited from the eighteenth century, the use of the same category in early legislation introducing employer liability for workplace injuries was interpreted so as to gradually shrink the set of workers to which that concept would apply.¹⁰⁴ A second generation of legislation, expanding workers’ compensation and creating regimes of national health insurance and unemployment insurance, were made applicable to the new category of ‘contracts of service’ (though with numerous exclusions on the basis of income level, income dependency on an individual employer, and industry).¹⁰⁵ The ‘control’ test, adapted by the courts to delimit the boundaries of this new category, led to the exclusion from these schemes for large swaths of workers who the courts found to be insufficiently bound to—or bound to obey—an employer.¹⁰⁶

Obviously, these were years of great transition, and it would do Deakin and Wilkinson’s analysis a disservice (as well as my own) to attribute to the period more stability and coherence than it had. What I nonetheless want to draw out from this period was the nature of the conceptual schema that distinguished ‘workmen’ from ‘employees,’ and which subsequently informed the control test used to delineate the bounds of the ‘contract of service.’ The table in figure 2 gives the impression that the labour market post-1875 was governed under a conceptual scheme with a clear tripartite structure. But there was no unified code intended to govern the whole of the labour market, neatly marking off parts of the workforce according to two strictly delineated internal margins. Rather, the category of ‘workman,’ and then of the ‘contract of service,’ created a space within which certain rights and obligations were to be implemented, with those falling outside nominally subject to a less orderly, more generally-applicable collection of norms. Nonetheless, it is feasible to point to two key distinctions used to divide the workforce, distinctions muddled but not totally displaced by the applications of the ‘control’ test.

On the one hand, the application of both disciplinary rules and social protections were attenuated where work relationships came closer to the transitory, arms-length,

¹⁰⁴ *ibid* 86–89.

¹⁰⁵ *ibid* 89–90.

¹⁰⁶ *ibid* 90–94.

intermittent or the autonomous. 'Independent contractors' were thought to be just that: moving from one contract to another (independence), being paid for services rendered rather than for subjection to employer authority (output rather than input), possibly exercising some authority over others. But, as with the shrinking applicability of the Workmen and Employers Act, those markers could also be used to exclude casuals, those engaged in piecework, or workers selected by an intermediary.¹⁰⁷

Working alongside this logic, however, was reasoning rooted in the hierarchical logic of class. Some decisions about the applicability of labour discipline and social protection were based on distinctions we might identify with independence—varieties of relational remoteness between the worker and the person for whom the work was ultimately performed. But those decisions were often also guided by a worldview in which an implicit status hierarchy worked to rank, in a single schema, the inherent character of individuals, their skill level, the kind of jobs they were engaged in, the level of respect they were due, and the level of income and job security they could expect.¹⁰⁸ Nearer to the top of the hierarchy, bourgeois ideology made it appropriate to apply contractual principles—mutuality of obligation, market autonomy, contractual freedom. Only nearer to the bottom of that hierarchy did the courts find it appropriate to apply a regime rooted in disciplinary subjection to the employer, or which might (as with social insurance) imply an incapacity to prudently plan for the future.

As with most legal concepts, the logic of the scheme did not work like an input-output system, with the appropriate concept first determined by reference to a precise list of factual predicates, and then used to draw normative predicates. The category of workman, and then of contract of service, was not applied (or eschewed) by measuring the level of responsibility an employer had actually reposed in a worker, or discovering what level of autonomy they had actually enjoyed in their work—certainly, judges did not look to the presence or absence of a written, negotiated contract, let alone to its terms! Rather, judges drew its boundaries according to a ranking of kinds of work which took for granted the correlation of higher prestige jobs, superiority of character, degree of trustworthiness, higher income, greater job security, along with the capacity for judgment in market relations. Thus, what was relevant, in a case where a widow sued

¹⁰⁷ *ibid* 70, 91, 93–95.

¹⁰⁸ *ibid* 79–80, 86, 88–89.

under a compensation scheme for workplace accidents, was not whether her husband had *in fact* made provisions for his family in the event of his death, but the idea that managers and others ‘earning good salaries’ *should* not, unlike those in ‘a position of dependence’ be thought of as lacking the capacity to make such provision.¹⁰⁹ A governess was found to be owed a long notice period not because of any explicit agreement she had made with her employer, but because of her ‘station ... and the manner in which such a person is usually treated’—namely, as better than a domestic servant, and certainly better than a labourer.¹¹⁰ A bus conductor could not be a workman, a court found, because his job depended primarily on ‘confidence in his honesty.’¹¹¹

The conceptual schema that has since emerged in the United Kingdom—one which echoes in the approach to labour market regulation taken by countries across the globe—is in some sense a hybrid of the forms and reasoning that informed the law prevailing from the end of the nineteenth century to the middle of the twentieth: ‘a curious overlapping of contract and status.’¹¹² They locate the crux of that transformation in the 1942 Beveridge report, which introduced a binary scheme, and social legislation passed in 1946, that implemented that binary by defining eligibility for benefits in terms of a single distinction between ‘employed earners’—those ‘gainfully occupied in employment ... under a contract of service’—and those employed on their own account.¹¹³ This unified schema was further inscribed by decisions of the courts in the 1950s that confirmed that employee and contract of service were to be considered synonymous for the purposes of this social legislation, and by legislated employment protections in the 1960s and 1970s whose scope of application was delimited by a ‘contract of employment’ that merged the concepts of contract of service and employment.¹¹⁴ In social insurance, self-employment works as a distinct category, part of a larger classification that sorts and orders benefit eligibility and contribution liability; in employment protection legislation, the self-employment (or sometimes, independent contractor) goes unmentioned, but is used by

¹⁰⁹ *ibid* 88–89, citing *Simpson v. Ebbw Vale Steel, Iron & Coal Co.* [1905] 1 KB 453 (UK)

¹¹⁰ *ibid* 79–80, citing *Todd v. Kerrich* (1852) 8 Exch 215.

¹¹¹ *ibid* 88, citing *Morgan v. London General Omnibus Company*, Court of Appeal ([1884] LR 13 QBD 832. 834 [Brett MR]).

¹¹² *ibid* 108.

¹¹³ *ibid* 94. Income tax categories and collection practices had already eliminated status distinction between employed persons by 1943. *ibid* 94–95, n 285.

¹¹⁴ Deakin and Wilkinson (n 5) 94–95, 101.

the courts as a catchall residual that shapes reasoning about the boundary of the contract of employment.

Though it faced some controversy, and criticism from those who thought it would undermine legislative intentions, the legal system's regulation of work relationships ultimately became organized through two conceptions of contract. For independent contractors—the self-employed—the vision of contract that now governs has become one of arms-length exchange: temporary, functionally anonymous, limited in content, explicit in terms. For employees, the courts have ultimately adopted a more peculiar form, drawing not only from a relational conception of contract marked by good faith, mutuality of obligation, and reciprocity, but from a decidedly non-contractual assumption of hierarchy of employer over employee.¹¹⁵

B. A Litany of Forces

In line with their book's ambition to construct an account of socio-legal co-evolution, Deakin and Wilkinson provide a compelling record of how the conceptual transformations detailed above contributed to, drew from, were stymied by and supported changes happening both in the institutional organization of work and production, and in shifting distributions of political power.

At a high level of generality, they describe those processes as follows:

Pressures and opportunities for legal change were derived from outside the legal system in the form of political mobilization, changes in the predominant form of economic organization, and shifts in the structure of the family and the composition of the labour force.¹¹⁶

In other discussions of the same historical episode, Deakin has suggested that these '[m]utations in legal forms were ... the result of a complex interplay of social, economic and political forces.'¹¹⁷ This language of 'forces' conjures a wholly material interaction, one that clashes with an active role for interpretation or for differences in perspective, frame or presupposition.

Let me give a longer summary of Deakin and Wilkinson's account of the processes that interacted with the rise of the contract of employment. Its emergence depended, first, on

¹¹⁵ *ibid* 101-04, 108.

¹¹⁶ *ibid* 18.

¹¹⁷ Deakin, 'Evolution for Our Time' (n 19) 18.

the gradual expansion of wage-dependent, market-hired labour, a process which had unfolded over centuries.¹¹⁸ Through the nineteenth and twentieth centuries, a complex interplay of legal structures, industrial realities and institutional settlements inflected upon and shaped one another.¹¹⁹ Collective bargaining, changes in company law, and technological change worked together to affect economies of scale within the firm, contributing to the emergence of the ‘modern, integrated form of corporate organization.’ On the one hand, capital market development, backed by the legislative introduction of limited liability protection, allowed enterprise size to increase. Taking advantage of these economies of scale depended on internal reorganization of firm structure, and led in particular to the growth of a much larger managerial class.¹²⁰ The rising power of unions, acting at first in spite of legal barriers and eventually backed up by legislative protection, extended organizing into the lowest rungs of manual work, which gradually decreased employer incentives to rely on internal contracting. Those changes reflected both technical capacities and the interests of employers. Collective bargaining also led to increased security of work and decreased reliance on casual hiring practices; the presumption of indeterminate, long-term hiring was eventually codified in statute.¹²¹ On the other hand, the incipient welfare state institutions threatened the viability of smaller firms, by introducing costs and liabilities that changed economies of scale. As much as welfare state protections relied on the prevalence of fixed employment and vertical integration of production, the liabilities it imposed on firms also encouraged those trends.¹²² The effort to limit liability under both workplace injury and social protection schemes created an economic pressure, underwritten by employer interests, to narrowly interpret the scope of the ‘contract of service.’¹²³

This paragraph-long summary obviously cannot capture all the nuances of the account which Deakin and Wilkinson weave together across multiple chapters of their book. [I do think it gives a clear idea of the factors they include and how they act on law] Let me give a word to how this narrative should be structurally interpreted. One could imagine from

¹¹⁸ They provide evidence that by the seventeenth century, wage labour served as a widespread complement to, though seldom a full substitute for, income from subsistence farming. Deakin and Wilkinson (n 5) 45–46.

¹¹⁹ *ibid* 43.

¹²⁰ *ibid* 96–98.

¹²¹ *ibid* 98–100.

¹²² *ibid* 87–88.

¹²³ *ibid* 91–92.

this language that Deakin has in mind a strict binary division, where law transforms internally as a learning process, as the existing semantic structures bend and stretch in response to a continual drip feed of knowledge about institutional compromises and interest group desires, while in the material world outside law, institutional practices and political strategies are shaped by the force of law, experienced exclusively as a social fact (coercion plus signalling).

At least for the factors that they give attention to—not just those within the frame, but which get the spotlight—they seem to have captured the relevant flows of influence.¹²⁴ In the section that follows, I want to linger on a factor which, though it repeatedly walks onto the stage in their narrative, is never given its own lines.

C. Politics as a Conduit for Ideas?

The goals and plans of the state, and the policies of the government make a continual appearance in their history of labour market governance, including during the consolidation of the contract of employment. Even if you pass over or ignore examples where legislation is loosely discussed in terms of its intent, purpose or aim, and focus exclusively on cases where the state is explicitly discussed as an actor in its own right, you find the story rife with occasions in which the state's intent, purposes or aims are attributed an important role.¹²⁵ 'Government' hangs over the narrative (indeed, continually intervenes in it) as an autonomous agent, sometimes as a vehicle for the goals of other groups, but sometimes attributed with its own preferences and agenda.¹²⁶ My goal in highlighting the importance of the state in their account is not to suggest that we should 'bring state the back in,' by making more explicit how variations in the power, reason and techniques of state might help to shed light on the processes they document.¹²⁷ Rather, I draw attention to the state because of the way that it consistently

¹²⁴ Knowledge is not the only factor excluded from their frame. For example, they give only glancing reference to the way in which the structure of international competition served as a but-for factor for the particular way in which the contract of employment was constituted. Deakin and Wilkinson (n 5) 17–18. The relationship of Britain's national economy to that of the broader British empire is a notable exclusion, though it is possible the relevant transformations were not strongly impacted by changes in e.g. terms of trade with the colonies. They also mention automation, but not the complex of technologies—and techno-scientific knowledge!—that made automation possible.

¹²⁵ See e.g. Deakin and Wilkinson (n 5) 2, 17–18, 27, 39, 40, 47, 49, 61, 107.

¹²⁶ *ibid* 43.

¹²⁷ It strikes me as difficult to reconcile a theory that imagines society wholly as an interaction between and within systems of communication with careful thinking about the state's capacity to enforce and materialize legal relations.

functions, in their account, as a vehicle for conflicting ways of thinking about the organization of the economy, work and production.¹²⁸

As I read it, this manifestation of modes of thinking, and especially of conflicting or changing modes of thinking, threatens to disrupt Deakin's whole theoretical schema.¹²⁹

One way that these references to the state and its policy orientation might be assimilated into Deakin's broader approach might be to frame these ways of thinking as a matter of pure *politics*. Deakin and Wilkinson are not clear about what they mean by politics or by 'political forces;' the dynamics of the political system are not a central preoccupation of any of Deakin's analyses.¹³⁰ Whatever politics might be intended to cover in their framework, it certainly does not boil down to interests, the distribution of those interests among the population, the factors that determine the representation of those interests in legislation or the courts, or how particular institutions integrate the resulting claims and positions. As such, this approach seems to accord with their usage of the term.

D. The Origins and Significance of the Beveridge Report

I want to try and test this model by attending to a key moment in genealogy of the contract of employment, as laid out in their own account of it: the 1942 publication of the Beveridge report, and its subsequent adoption in social insurance legislation.¹³¹

The Beveridge report has had wide influence on the design and conception of social policy schemes worldwide in the 75 years since its publication.¹³² My interest is in its consequences for UK labour law, and specifically, in whatever role it played in introducing and consolidating the sharp binary schema between employees and the self-employed. Broadly, then, this section is about the process involved in the production of

¹²⁸ They describe labour law as a 'political project of social reform' encoding values based both on democratic emancipation, and on managerialist discipline; they indicate, though they do not elaborate, that their goal is to account for how law co-evolves not only with political movements, but also political ideologies. Deakin and Wilkinson (n 5) 1, 3, 35.

¹²⁹ How disruptive it might be would depend on whether 'ways of thinking' could be incorporated as an additional force sitting alongside politics, economics and the social (see above, nn 117 and associated text) or if 'ways of thinking' had the capacity to traverse the barrier between the legal system and other social systems.

¹³⁰ cf the discussion above, text to nn 87-89.

¹³¹ Above, text to n 113-115.

¹³² Speaking in the UK context, Glennerster and Evans assert: 'No historical document is cited more frequently in postwar social policy debate' Howard Glennerster and Martin Evans, 'Beveridge and His Assumptive Worlds: The Incompatibilities of a Flawed Design' in John Hills and others (eds), *Beveridge and Social Security* (Oxford University Press 1994) 56; see also Noel Whiteside, 'The Beveridge Report and Its Implementation: A Revolutionary Project?' [2014] *Histoire@Politique* 24; John Hills and others (eds), *Beveridge and Social Security* (Oxford University Press 1994).

the Beveridge report. More narrowly, I am interested in what went into the production of its central classification scheme.

Deakin and Wilkinson make some effort to frame the reception of the report in law through the frame of Deakin's socio-legal evolution theory:

conceptual innovation was triggered by an external event, that is, by a political process set within a wider pattern of far-reaching economic and social changes; on the other [hand], the change occurred through an act of legal interpretation, using procedures specific to the juridical and legal-administrative process. These two sets of explanations are not mutually incompatible. The new rule resulted from the interaction of the legal system with the wider political and economic environment. This interaction can be understood in terms of a particular evolutionary dynamic. Pressures for selection came from the external economic and political environment, while the particular stock of precedents available to the draftsman and the courts of the time provided the source of variation in the options from which they could choose. The procedures of 'internal' validation within the legal system, in particular the relevant conventions of statutory drafting and rules of precedent for judicial decision-making, constituted the mechanisms of inheritance by which the continuity of the new rule (its consistency with existing practice and its binding force for the future) was ensured. The result was a 'new career' for the juridical form of the contract of service, which was in the process of being renamed the contract of employment.¹³³

What I want to emphasize in this quote, and draw out a bit more, is the confluence of activity that squeezed into that first clause, the 'conceptual innovation triggered by an external political process.' By the third sentence, the external pressure has been reduced to 'the wider political and economic environment.' Yet there is much in Deakin and Wilkinson's account of the genesis of the Beveridge Report, and much more elsewhere, that is hard to match up with a story that is reducible to pure politics or pure economics. Let me here just provide a hint of the dynamics and factors at play in the report's production and widespread success.

1. There was, first, a broad revolution in thinking about the problems of work and poverty, from a model of pauperism that understood poverty as a result of failings in an individual's character, to a model of unemployment that was attributed to

¹³³ Deakin and Wilkinson (n 5) 32.

structural features of market economies and poor management by government: a transformation that was telegraphed by the early twentieth century.¹³⁴

2. The report drew from a concept of employment-based social citizenship which was of course not simply a way of managing economic problems, but a way of imagining the polity and the relation of members to it.¹³⁵
3. The report was founded on a principle of horizontal redistribution, in the sense of pooling risk among wage earners, but not vertical redistribution; adoption of scheme that defined classes (or categories) in terms of contribution to production.¹³⁶ As put by Whiteside, '[t]he rationale for universal coverage [was] economic, allowing middle class contributors (with a lower risk of job loss) to subsidise working class claims. This subsidy [was] arguably reversed in old age as the upper classes receive state pensions for more years than their working-class counterparts, thanks to their higher life expectancy.'¹³⁷ This arrangement could be reconciled with a Coasean bargain between particular social groupings, as per the discussion in Chapter 2. Nonetheless, this bargain was not in fact negotiated, but mediated by experts who had to come up with a model to reconcile political feasibility and socially-desirable goals.
4. Many of these ways of thinking in turn had strong links to Keynes and Keynesianism.¹³⁸

IV. Conclusion

Simon Deakin has made a commendable effort to reconcile a sociological understanding of law, which takes seriously the interior dynamics of the legal system, with an external view that appreciates the important role of interests in shaping law-making through both legislature and courts. Yet, in his attempts to apply his model to real historical examples, he has brought to the surface factors that are hard to slot into any of his basic classifications of law, politics, and economics.

There are a number of ways of imagining how ideas might be integrated into evolutionary accounts of legal change. The most obvious from the Beveridge report example is that reason, planning and vision contribute to the assemblage of legal variants which are ultimately selected by the interaction between the legal system and the effective complex of economic interests. Yet when it comes to court decisions, it is hard to accept that non-

¹³⁴ *ibid* 154–55.

¹³⁵ *ibid* 164.

¹³⁶ Paul Bridgen, 'A Straitjacket with Wriggle Room: The Beveridge Report, the Treasury and the Exchequer's Pension Liability, 1942–59' (2006) 17 *20 Century Br Hist* 1, 5–6.

¹³⁷ Whiteside (n 133) 6.

¹³⁸ *ibid* 4.

legal concepts, ideals, presuppositions, and various other epistemic objects do not enter into the reasoning of judges, and therefore play an active role in the selection process itself as well.

5 — Law & Finance: Cause and Effect

‘Legislators who, having freed themselves from the shackles of authority, have learnt to soar above the mists of prejudice, know as well how to make laws for one country as another: all they need is to be possessed fully of the facts; to be informed of the local situation, the climate, the bodily constitution, the manners, the legal customs, the religion, of those with whom they have to deal; possessed of these data, all places are alike.’
—Jeremy Bentham (1843)¹

I. Introduction²

The close of the last chapter presented a case that knowledge may sometimes play an important role in legal evolution that is not reducible to or determined by politics, economics, or some other factor. In short, knowledge matters. My critiques of Deakin’s own case studies leave open a margin of interpretation. They articulate how knowledge practices and non-legal expertise *might* matter, rather than definitively proving their influence. This chapter provides substantive empirical backing to the thesis that knowledge and non-legal expertise *definitively* matter in some cases.

In contrast to the last three chapters, this chapter is not organized around the question ‘what drives legal change?’ Rather, the chapter asks ‘what drives the uptake and adoption of ideas in a given context, or by certain kinds of actors?’ It addresses the Law & Finance paradigm, the World Bank’s *Doing Business* project, and the consequences of the latter for law reform in large parts of the global South. Some attention is devoted to the connections holding these three phenomena together. I survey the shared intellectual origins and

¹ Jeremy Bentham, ‘Essay on the Influence of Time and Place in Matters of Legislation’ in John Bowring (ed), *The Works of Jeremy Bentham*, vol 1 (William Tait 1843).

² Versions of the argument in this chapter were presented at the 2014 & 2015 Private Law Doctoral workshops organized by Hans Micklitz and Stefan Grundmann, at the 2015 Conference of the Institute for Global Law and Policy (Harvard Law School) and at a January 2017 writing workshop on critical and heterodox approaches to law and development, hosted by Mark Toufayan and Siobhan Airey at the University of Ottawa. I thank participants in those workshops, and especially Przemysław Pałka, Sofie Møller, Genevieve Painter, Umut Özsu and Yane Svetiev for feedback on earlier drafts. All errors are mine.

methodological concerns that connect Law & Finance with *Doing Business* and review the expanding evidence that countries have amended laws and policies in line with *Doing Business* criteria.

The core of the analysis is an attempt to understand what made the Law & Finance paradigm so attractive to the World Bank. My rationale is as follows. The affinities that link an intellectual project, such as Law & Finance, to legal reforms in numerous countries are not as determinative for the 'knowledge matters' hypothesis as they may seem at first. Many models of legal evolution presume that the state's legal system is autonomous. That presumption is disrupted by the suggestion that the World Bank and international institutions may have had a causal influence on national legal choices. It might nonetheless be possible to integrate international institutions into our picture of the national environment in which legal (co-)evolution occurs. At that point, the question becomes, 'does this count as mere politics or as something else?' A compelling strand of literature has interpreted the World Bank's actions and its global influence in terms of the political interests of particular groups of global actors. The influence of World Bank programs may complicate models of law co-evolving with political and economic systems, but it does not necessarily unsettle their basic coordinates.

That places us in the next step in the chain of effects. At play in the interactions between *Doing Business* and national governments was not just a broad vision of economic order or a particular set of interests. The World Bank endorsed, and countries adopted, a specific, narrow set of reforms. It is possible that the particular agenda adopted by the World Bank (and by the principals of the *Doing Business* project) resulted from a confluence of political interests, intellectual networks, and the Bank's own political and institutional constraints. The particular ideas that were adopted and promoted would be broadly determined by this confluence of factors, with the specifics shaped by small contingencies, as in whatever ideas happened to be at hand at any given moment.

This possibility is essentially the null hypothesis of this chapter. I show, instead, that the technicalities of the ideas at the foundation of the *Doing Business* project, their political or economic content, and the way in which they framed history, agency, problems, and

solutions were critical to making them appropriate as the basis for particular World Bank projects as well as a more general project of international governance.³

A. The Puzzle of the Law & Finance Project

Let me begin with a story familiar to private law scholars and development experts and then use that story to frame a puzzle. With the publication in 1996 and 1997 of two now-notorious articles, namely 'Law and Finance' and 'Legal Determinants of External Finance,' Andrei Shleifer and a network of collaborators altered the dominant frames through which economists, legal scholars, and international institutions thought about the interplay between legal rules, financial institutions, and economic outcomes.⁴ Shleifer's key claim was that targeted legal protections for shareholders and creditors in large, publicly listed corporations would lead to economically beneficial changes in the macro-structure of the economy. In the next part of this chapter, I set out the fundamental structure of Law & Finance studies, interrogating the arc of the argument that was set out in those original two articles

The methodology used by these two papers was subsequently broadened and applied to many other aspects of institutional and regulatory design. Shleifer and his collaborators created aggregate, rule-based measures of how 'burdensome' labour laws were and causally linked those measures to unemployment and labour informality.⁵ They extended and applied methods first developed by Hernando de Soto to construct a measure of how much it cost and how long it took to register a business.⁶ They developed an innovative way of measuring 'procedural formalism' in a given country's courts⁷ and found that procedures that affect recovery for secured creditors during bankruptcy were associated

³ I take the idea of technicalities from Annelise Riles, 'A New Agenda for the Cultural Study of Law: Taking on the Technicalities' (2005) 53 *Buff L Rev* 973. The level of analysis I am concerned with also resonates with Foucault's concept of governmentality. Michel Foucault, 'Governmentality' in Graham Burchell and others (eds), *The Foucault Effect: Studies in Governmentality, with Two Lectures by and an Interview with Michel Foucault* (Harvester Wheatsheaf 1991); Nikolas Rose and others, 'Governmentality' (2006) 2 *Annual Review of Law and Social Science* 83.

⁴ Rafael La Porta and others, 'Legal Determinants of External Finance' (1997) 52 *Journal of Finance* 1131; Rafael La Porta and others, 'Law and Finance' (1998) 106 *Journal of Political Economy* 1113. 'Law and Finance' first appeared as a National Bureau for Economic Research working paper in 1996.

⁵ Juan C Botero and others, 'The Regulation of Labor' (2004) 119 *The Quarterly Journal of Economics* 1339.

⁶ Simeon Djankov and others, 'The Regulation of Entry' (2002) 117 *The Quarterly Journal of Economics* 1; Hernando de Soto, *The Other Path: The Invisible Revolution in the Third World* (June Abbott tr, 1st edn, Harper & Row 1989).

⁷ Simeon Djankov and others, 'Courts' (2003) 118 *The Quarterly Journal of Economics* 453.

with the quantity of private debt.⁸ More importantly, they found that reduced formalism, lighter labour regulation, easier business registration, and expedient bankruptcy proceedings were associated with: reduced corruption, lower informality, better public opinions of the courts, and greater access to finance. The papers founded a cottage industry of related research among finance scholars, including further elaborations of Shleifer's data to explore the effect of 'investor protection' on economic and financial variables, as well as new kinds of quantified legal measurements.⁹

The scholarship Shleifer produced with his collaborators has been the subject of seemingly endless elaboration, extension, and critique. 'Law and Finance' is one of the most-cited economics articles ever written.¹⁰ The literature spawned by 'Law and Finance' and 'Legal Determinants' was capacious enough for the authors to publish a comprehensive consolidation of theory and empirics in 2008.¹¹ In 2009, critiques of that corpus filled symposium issues of three North American law reviews.¹² Debates inspired by this work were condensed in an edited collection published in 2012.¹³ Part IV of this chapter explores the consequences of the Law & Finance project through a case study of its influence through the *Doing Business* project. The authors are 'quite simply, academic rock stars.'¹⁴

Shleifer's scholarship quickly came under fire, however. Some of the criticisms were straightforward methodological concerns, questioning the coding criteria used to measure legal structures, the fit between variables and investor protection, and the methods that linked cause and effect. Substantively, the central point of contention was not about whether investors needed special protections, but rather about the nature of the causal relationships that link legal systems, legal rules, and economic outcomes. Part

⁸ Simeon Djankov and others, 'Debt Enforcement around the World' (2008) 116 *Journal of Political Economy* 1105.

⁹ Curtis J Milhaupt and Katharina Pistor (eds), *Law and Capitalism: What Corporate Crises Reveal about Legal Systems and Economic Development Around the World* (University of Chicago Press 2008) 20.

¹⁰ For impact, see Simon Deakin and Katharina Pistor, 'Introduction' in Simon Deakin and Katharina Pistor (eds), *Legal Origin Theory* (Edward Elgar 2012) ix-x.

¹¹ Rafael La Porta and others, 'The Economic Consequences of Legal Origins' (2008) 46 *Journal of Economic Literature* 285.

¹² See e.g. Ruth V Aguilera and Cynthia A Williams, 'Law and Finance: Inaccurate, Incomplete, and Important' [2009] *BYU L Rev* 1413; Catherine Valcke, 'Introduction [Focus: Economics and Comparative Law]' (2009) 59 *U Toronto LJ* 179; 'Symposium on Legal Origins' (2009) 57 *Am J Comp L* 765.

¹³ Simon Deakin and Katharina Pistor (eds), *Legal Origin Theory* (Edward Elgar 2012).

¹⁴ Aguilera and Williams (n 12) 1424-33.

III explores some of these critiques, emphasizing the fundamental theoretical weaknesses of Law & Finance and a collection of arguments that followed in its stead.

That is the familiar story. The puzzle animating this chapter, though, is *why* Law & Finance was so successful. I tackle one aspect of this puzzle in Part V of this chapter, which examines the possible factors contributing to the integration of the Law & Finance paradigm into the *Doing Business* project. I argue that, paradoxically, the theoretical weaknesses in Shleifer's research may be what made it so attractive both to national policymakers and to the players at the Bank.

Part VI concludes with reflections on the implications of this chapter for questions of law, knowledge, and socio-legal change.

B. Sources, Methods and Key Terms

Before moving to the substance of my argument, I will clarify a few choices I made in choosing, characterizing, and labelling my research objects.

The body of scholarship informing this chapter has been aggregated by earlier scholars in a variety of ways.¹⁵ Although the sources assembled by synthetic reviewers and strident critics have varied, they have universally hailed as key the two Shleifer papers from 1996 and 1997. Much of the literature proceeds tacitly on the basis that a single story about the aftermath of these studies is possible. The two papers become, alternately, the keystones of the field of Law & Finance, the precursor of Legal Origins Theory, or a watershed in comparative corporate governance.¹⁶ Others have taken these two articles as artefacts of a unified body of thought about international development or corporate governance, identifiable using the initials of their authors (LLSV) or as 'La Porta et al.'¹⁷

¹⁵ For contrasting attempts at synthesis, see Deakin and Pistor (n 13); La Porta and others, 'The Economic Consequences of Legal Origins' (n 11).

¹⁶ Luigi Zingales and Steven N Kaplan, 'How "Law and Finance" Transformed Scholarship, Debate', *Chicago Booth Review* (5 March 2014) <<http://review.chicagobooth.edu/magazine/spring-2014/how-law-and-finance-transformed-scholarship-debate>> accessed 8 July 2015; Deakin and Pistor (n 13); Klaus J Hopt, 'Comparative Corporate Governance: The State of the Art and International Regulation' (2011) 59 *Am J Comp L* 1.

¹⁷ For examples of 'La Porta et al.' Milhaupt and Pistor (n 9); of 'LLSV': Mathias Siems and Simon Deakin, 'Comparative Law and Finance: Past, Present, and Future Research' (2010) 166 *Journal of Institutional and Theoretical Economics (JITE) / Zeitschrift für die gesamte Staatswissenschaft* 120; John W Cioffi, 'Legal Regimes and Political Particularism: An Assessment of the Legal Families Theory from the Perspectives of Comparative Law and Political Economy' [2009] *BYU L Rev* 1501; Claude Ménard and Bertrand du Marais,

The considerable literature inspired by these two articles advanced in multiple directions, often toward incompatible conclusions. Some authors have tried to extend and elaborate on Shleifer's original empirical findings, drawing upon and adding to the archive of novel data to answer an array of questions about law's causes and effects. Others have sought to recuperate and refine the theoretical underpinnings of his empirical findings in the face of a flood of criticism from various sources. Nonetheless, much of this critical literature adopted the underlying edifice of the original articles, even when scholars criticized some particular premise, argument, or conclusion Shleifer had made. When labels are applied loosely and contributions collected together carelessly, it is easy to lose track of the literature, claims, questions, and concerns under discussion.

I have organized my sampling from this literature using two linked criteria. Firstly, I have limited myself to claims, arguments, and ideas that can be identified with a single person, Andrei Shleifer. There are a variety of reasons for this choice. Shleifer may not be a household name, but he is 'the most-cited economist ever' and arguably one of the world's leading legal experts.¹⁸ He is the uniting thread tying together a great body of research. He was co-author on the original two contributions and on the paper that framed their underlying microeconomic theory.¹⁹ In 2008, he helped write an influential restatement of theory and findings.²⁰ He was co-author on various influential attempts to refurbish the theoretical underpinnings of the original findings.²¹ In 2012, he published an edited collection of some of the field's touchstone works, strongly embracing the basic dilemma of policy-making that is implied in portions of that literature.²² As shown in Part IV, he was heavily involved not only in the academic foundations of the *Doing Business* indicators but directly in the construction of the *Doing Business* project itself.²³

'Can We Rank Legal Systems According to Their Economic Efficiency?' (2008) 26 Washington University Journal of Law & Policy 55.

¹⁸ See eg the evidence reviewed in the introduction of Jonathan Klick, 'Shleifer's Failure (Review of *Failure of Judges and the Rise of Regulators*)' (2013) 91 Tex L Rev 899.

¹⁹ La Porta and others, 'Law and Finance' (n 4); La Porta and others, 'Legal Determinants of External Finance' (n 4); Andrei Shleifer and Robert W Vishny, 'A Survey of Corporate Governance' (1997) 52 Journal of Finance 737.

²⁰ La Porta and others, 'The Economic Consequences of Legal Origins' (n 11).

²¹ Edward L Glaeser and Andrei Shleifer, 'Legal Origins' (2002) 117 The Quarterly Journal of Economics 1193; Simeon Djankov and others, 'The New Comparative Economics' (2003) 31 Journal of Comparative Economics 595; La Porta and others, 'The Economic Consequences of Legal Origins' (n 11).

²² Andrei Shleifer, *The Failure of Judges and the Rise of Regulators* (MIT Press 2012).

²³ I have also been informed by a highly respected American expert on securities, corporate governance, and finance that a large portion of Shleifer's collaborators refer to him as 'the boss.'

Focusing on Shleifer's contributions is also a matter of intellectual fairness. I eschew the all-too-common practice of viewing an individual's publications as the result of a continuous effort to express a single coherent theory.²⁴ Nevertheless, as unreasonable as it is to expect scholars to maintain total consistency over time, it would be unfair to attempt to both synthesize and criticize claims written by multiple authors as if they were all necessarily engaged in the same endeavour or traversing the same theoretical terrain.

Rejecting the idea that an author's oeuvre embodies a single, uniform, stable, and coherent conceptual project has been particularly helpful in the development of this chapter. Between 2000 and 2008, Shleifer and his collaborators produced a series of articles that sought to use Shleifer's findings in a more robust and credible account of the relationship between legal change, economic transformation, and political dynamics in individual countries.²⁵ Shleifer's critics have often read his theoretical work together with his empirical work, taking for granted that the former enriches and buttresses the latter.²⁶ One key finding of my research is that, when taken at face value and reconstructed in a generous way, his overarching model of legal change and its consequences flatly contradicts the theoretical underpinnings of the empirical studies that commenced with 'Law and Finance' and 'Legal Determinants.' Beyond a difference in the respective focus that each places on law's causal determinants and its economic consequences, the bodies of work often referred to as Law & Finance and Legal Origin Theory are also distinguished by quite pronounced theoretical disparities.²⁷

Finally, Law & Finance is itself a fraught label. On the one hand, it is now used to describe a subfield of finance scholarship that consolidated in the mid-1990s with the help of Shleifer's work and that is concerned with how the allocation of legal rights shapes financial structures, practices, and macro-outcomes.²⁸ On the other hand, in line with

²⁴ Michel Foucault, *Archaeology of Knowledge* (Routledge 2002) 23–24; Mariana Valverde, 'Specters of Foucault in Law and Society Scholarship' (2010) 6 *Annual Review of Law and Social Science* 45.

²⁵ Glaeser and Shleifer (n 21); Edward L Glaeser and Andrei Shleifer, 'The Rise of the Regulatory State' (2003) 412 *Journal of Economic Literature* 401; Djankov and others, 'The New Comparative Economics' (n 21); La Porta and others, 'The Economic Consequences of Legal Origins' (n 11).

²⁶ Pistor and Milhaupt, in characterizing Shleifer's approach as the 'prevailing view' on the relationship between law and capitalism, do not distinguish between the earlier empirical contributions and the later theoretical work. Milhaupt and Pistor (n 9) ch 1.

²⁷ For an investigation into the conceptual structure of Shleifer's latter-day theorizing and a comparison and contrast with the theoretical underpinnings of the empirical studies, see Liam McHugh-Russell, 'A Critique of Legal Origins Theory' [unpublished manuscript].

²⁸ Zingales and Kaplan (n 16). Setting aside nearly a century of legal work on these questions, precursors of Shleifer's work on the economics side include Oliver D Hart, 'Incomplete Contracts and the Theory of the Firm' (1988) 4 *Journal of Law, Economics, & Organization* 119; Sanford J Grossman and Oliver D Hart, 'An

trends in Shleifer's own empirical work, numerous scholars have used 'Law & Finance' to group together studies that use a methodology inspired by the 'Law and Finance' and 'Legal Determinants' articles and to shed light on the economic consequences of particular rules and rule-sets.²⁹ Pistor, in particular, suggests that these studies are united by a 'Law and Finance paradigm.'³⁰ This chapter is interested solely in the works captured by the second meaning, since it is this literature, especially as developed by Shleifer himself, which helped to shape the *Doing Business* project.³¹ The label 'Law & Finance' is an awkward fit for this latter line of inquiry, though. While some relevant contributions have a loose connection to finance, such as those dealing with debt enforcement or corporate taxes, others have little to no connection, being concerned instead with labour law, the enforcement of contracts, or starting a business. Though I have retained the term 'Law & Finance' when I refer to the details of the model developed in the original two contributions, for the broader tradition of research I have chosen to use the label 'Legal Determinants' and refer to its theoretical aspects as the 'Legal Determinants paradigm.'

II. Theory and Temporality in the 'Legal Determinants' Paradigm: One Size Fits All

As mentioned in my introduction to this chapter, the techniques and tools that Shleifer developed between 1995 and 2010 were applied to a wide variety of policy questions.³² Despite this broad applicability, it is useful to build up a picture of the overarching theoretical apparatus within which it all worked, taking the Law & Finance paradigm as a starting point.

Each model consists of economic actors concerned with the protection and promotion of their own fiscal interests. The model set out in the 'Law and Finance' and 'Legal Determinants' articles was specifically concerned with corporate governance and, in

Analysis of the Principal-Agent Problem' (1983) 51 *Econometrica* 7; SJ Grossman and OD Hart, 'Disclosure Laws and Takeover Bids' (1980) 35 *Journal of Finance* 323.

²⁹ Siems and Deakin (n 17); Mathias M Siems, 'Legal Origins: Reconciling Law & Finance and Comparative Law' (2007) 52 *McGill LJ* 55; Katharina Pistor, 'Rethinking the Law and Finance Paradigm' [2009] *BYU L Rev* 1647.

³⁰ Pistor, 'Rethinking the Law and Finance Paradigm' (n 29) 1648.

³¹ See Part IV, below.

³² See notes 6–9 and associated text.

accordance with a paper Shleifer authored with Robert Vishny, framed in terms of the relations between managers of individual firms and investors who have to choose how much to invest in those firms.³³ Shleifer and Vishny's premise was the reasonable claim that the more confident an investor can be about the realization of promised returns and safety of their initial investment, the greater the amount they will be willing to invest. Investors have to entrust their money to firm managers whose interests will align imperfectly (or not at all) with their own. Investors and managers face a collective action problem: investors will invest less than they would if they were confident that they would be repaid and fairly compensated; managers seeking investment may attract less than the optimal amount because investors lack confidence that their interests will be adequately protected or promoted.

So far, this all accords with Jensen and Meckling's seminal contribution to the corporate governance literature.³⁴ Yet Shleifer's next steps represented a serious departure from, first, the tendency in the finance literature to ignore or denounce the legal regulation of financial relations³⁵ and, second, from trends in (American) corporate law literature favouring a contractual view of the firm that largely disavowed mandatory regulation.³⁶

First, where Jensen and Meckling had considered only contractual solutions to corporate governance problems and offered a vision that treated securities as cash flows, Shleifer and his team followed the pioneering work by Oliver Hart and others in attending to how securities and the relationships between investors and controlling players allocated rights.³⁷ Second, Shleifer and his team supposed that these relationships were forged in a world composed of discrete national economies, each governed by a distinct corpus of national law. The availability of comparative data allowed Shleifer to take a step that had been ignored by the financial literature, which was to imagine the relationship between the parties as disciplined not only by market pressures and property and contract relations, but also by (mandatory) law. In his model, each country's law is composed of

³³ Shleifer and Vishny (n 19).

³⁴ Michael C Jensen and William H Meckling, 'Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure' (1976) 3 *Journal of Financial Economics* 305.

³⁵ Zingales and Kaplan (n 16).

³⁶ As put colourfully by Coffee, Shleifer's research helped to reveal a spectre that American approaches to corporate governance had once thought exorcised: 'the spectre that law matters.' John C Coffee Jr., 'Privatization and Corporate Governance: The Lessons from Securities Market Failure' (1999–2000) 25 *J Corp L* 1.

³⁷ La Porta and others, 'Law and Finance' (n 4) 1113–14.

formal, peremptory rules imposed by the state to govern the structure and conduct of individual relationships. Firms, managers, and investors are located within one of these national economies and are thus subject to the domestic law of that country.

The key premise from the model of corporate governance adopted in the Law & Finance paradigm is that where an investor has an enforceable right that gives them the power to prevent, foresee, or respond to firm decisions that will negatively affect their interests, their confidence and expectations about returns will be higher, as will, *pari passu*, the amounts they are willing to invest. The final idea is that national legal systems can make such rights mandatory, which directs attention to how these rights vary among countries and across time. The central hypothesis is that a country whose laws provide more mandatory protections for investors will, *ceteris paribus*, see greater levels of investment than a country whose laws offer fewer such rights. Moreover, when a country passes laws that increase investor protections, such a change will increase levels of investment in firms. The change will also, it is hoped, nourish economic growth.³⁸

National economies can be understood both as a stock, i.e. the totality of all ownership claims, contractual relationships, assets, and liabilities, and as a flow, measured in terms of the value of transactions in a country over some benchmark period. Information about these claims and relationships can be aggregated to generate measurements that provide relevant comparisons between countries. The lynchpin of the Legal Determinants paradigm was a set of assumptions about the determinants of these national accounts. The first assumption is that moving between micro-institutional premises (investor confidence) and macro conclusions (market liquidity) requires no additional analytical work. In the Law & Finance studies, Shleifer seemed to suggest that the aggregate effect on investment would be roughly additive regardless of the differential effects that law could be expected to have on different groups of investors. An increasing quality of investment opportunities not only increases demand but generates a corresponding

³⁸ A previous collection of studies drawing from similar comparative methods had shown a positive correlation between financial market depth and per capita GDP growth rates. Robert G King and Ross Levine, 'Finance and Growth: Schumpeter Might Be Right' (1993) 108 *The Quarterly Journal of Economics* 717; RG Rajan and L Zingales, 'Financial Dependence and Growth' (1998) 88 *Am Econ Rev* 559; see generally Ross Levine, 'Financial Development and Economic Growth: Views and Agenda' (1997) 35 *Journal of Economic Literature* 688.

supply of savings whose origins or displacement from other uses need not be explicitly accounted for.³⁹

The novelty of Law & Finance studies did not lie in the substance of their arguments, but in their methodology and particularly their disruption of prior disciplinary traditions. The use of laws to encourage the deepening of capital markets informed development discussions and development policy.⁴⁰ Law & Finance offered a significant innovation to legal scholarship, in the form of what Holger Spamann has labelled 'large-sample, quantitative comparative law.'⁴¹ They were, of course, not the first empirical studies of law. Quantitative empirical approaches to legal inquiry have a long pedigree.⁴² The Law & Finance studies also drew on earlier economics scholarship using comparative quantitative data from a large cross section of countries.⁴³ The novelty of Shleifer's approach lay in the construction of precise numerical indicators that quantified legal rules, a step that held value insofar as those coding methods were used to construct data points for a large number of countries.⁴⁴ Though non-governmental organizations and private business had already begun by the 1970s to compile international cross-sectional data measuring national 'governance' factors, their synthetic measures were based on high-level, subjective judgments about the quality of legal and administrative systems made either by experts or by members of the public.⁴⁵ The 'objective' measures

³⁹ Pistor describes the tendency to draw conclusions about an entire market, as if 'a market is equivalent to the sum of all contracts or can be fully explained by multiplying stakeholder relations at a single firm by the number of firms in the market' as 'the extrapolation fallacy.' Pistor, 'Rethinking the Law and Finance Paradigm' (n 29) 1648–56.

⁴⁰ See eg David M Trubek, 'Law, Planning and the Development of the Brazilian Capital Market' Yale Studies in Law and Modernization No 3 (1971).

⁴¹ Holger Spamann, 'Large-Sample, Quantitative Research Designs for Comparative Law' (2009) 57 Am J Comp L 797.

⁴² Quantitative studies of law in action date as far back as the work of the American legal realists in the 1920s. See generally John Henry Schlegel, 'American Legal Realism and Empirical Social Science: From the Yale Experience' (1978–79) 28 Buff L Rev 459. For an example of the use of statistical methods and comparative data to measure the effects of individual legal rules, see the research on deterrent effects of the death penalty discussed inter alia in David Baldus, 'The Death Penalty Dialogue Between Law and Social Science (Symposium Keynote Address)' (1995) 70 Ind LJ 1033. In the early 1980s, event studies were introduced by financial economists as a way to measure how markets had responded to particular legal reforms and, by dint of that response, to judge the advisability of those and similar reforms. The pioneer here was G William Schwert, 'Using Financial Data to Measure Effects of Regulation' (1981) 24 Journal of Law and Economics 121; see generally A Craig MacKinlay, 'Event Studies in Economics and Finance' (1997) 35 Journal of Economic Literature 13.

⁴³ Deakin and Pistor (n 13); See e.g. Robert J Barro, 'Economic Growth in a Cross Section of Countries' (1991) 106 The Quarterly Journal of Economics 407; and especially King and Levine (n 38).

⁴⁴ Spamann, 'Large-Sample, Quantitative Research Designs for Comparative Law' (n 41) 798.

⁴⁵ Deakin and Pistor (n 10) x. For information about these 'subjective' measures see Daniel Kaufmann and others, *Governance Matters* (World Bank 1999).

developed by Shleifer and his collaborators based on state-level law had few precursors.⁴⁶

The key indicator introduced in the Law & Finance studies was a synthetic measure of state-level investor protection, the 'Antidirector Rights Index' or ADRI.⁴⁷ The construction of the data was conceptually simple, albeit resource-intensive, with each country being assigned a score between zero and six based on the number of a set of rights for corporate investors secured in sources of domestic law.

Shleifer's findings seemed not only to vindicate his theoretical intuitions but also to achieve a methodological coup. Regressions run on the data showed that the ADRI correlated with several measures of financial development, including the relative amount of equity held by 'outside' shareholders and the number of firms listed in a country's key stock exchange.⁴⁸

Correlation is not causation, however. Even if the bare associations in their cross-sectional freeze-frame were to be believed, those results were compatible with numerous alternative explanations beyond the claim that granting shareholders additional rights would bolster financial development.⁴⁹ For instance, it might be that a high level of financial development in a country fosters or creates a demand for more protective corporate laws. Or it might be that some other unidentified factor determines national trends in both corporate law and financial development.

The arguable masterstroke of the Law & Finance project that became the catalyst for the controversial 'legal origins theory' arose from the search for a method that could justify a claim about the direction of causality. Shleifer's strategy was to seek out an 'instrumental variable' that could be plausibly claimed to have an exogenous effect on the law and that could be linked to financial development only through its effect on law. To

⁴⁶ Deakin and Pistor, for example, point to comparative labour law indicators for the European Community developed by the OECD in the early 1990s. Deakin and Pistor (n 10) x.

⁴⁷ Shleifer and his team eventually abandoned the ADRI in favour of the alternative 'Anti Self-Dealing Index.' Simeon Djankov and others, 'The Law and Economics of Self-Dealing' (2008) 88 *Journal of Financial Economics* 430. The *Doing Business* project only ever used the latter, starting in 2005. It is notable that in the first decade following LSSV 1997 and 1998, well over a hundred studies were published relying on the ADRI as originally calculated. Holger Spamann, 'The "Antidirector Rights Index" Revisited' (2010) 23 *The Review of Financial Studies* 467, 468.

⁴⁸ A hypothesized correlation between investor protection and the availability of debt financing did not materialize.

⁴⁹ Note that, according to some critics '...some of the...key results were artifacts of measurement error.' Spamann, 'Large-Sample, Quantitative Research Designs for Comparative Law' (n 41) 798, and the sources noted therein; below, text to nn 59–61.

this end, they grouped countries into a 'legal family' classification, based primarily on the civil law/common law divide familiar to comparative lawyers, but also differentiating between 'French origin,' 'German origin,' and 'Scandinavian origin' legal systems.⁵⁰ To the degree that legal origin could be characterized as exogenous, the argument being that it lay in a past dead to influence from either current financial markets or modern-day corporate law,⁵¹ they argued legal origin could be used as an instrumental variable for this purpose.⁵²

The basic structure of the Legal Determinants paradigm relied on the availability of legal origin as an instrumental variable to draw very straightforward conclusions about the relationship between a country's legal system and its economy: in brief, better institutions and better laws lead to better economic results. Milhaupt and Pistor have described this as the 'prevailing view' of the relationship between law and economic development, and they place Shleifer and his collaborators at the forefront of promoting it.⁵³ The basic premise of Legal Determinants is:

good laws + good enforcement = good economic outcomes⁵⁴

In large part, the Legal Determinants studies concluded that bad economic outcomes were caused by bad laws or bad legal institutions, and that good outcomes flowed out of good laws and legal institutions.

Their claim is not that specific economic outcomes can be pursued in a particular country if that country implements specific laws to govern relationships of a given kind. Rather, it is that *any* country can implement the *same* laws to achieve the *same* ends. This is why, for many scholars and especially for policymakers, Legal Determinants came to mean, and continues to mean, precisely what the *Doing Business* project recommends: not only

⁵⁰ The original legal families indicators were based on Thomas H Reynolds & Arturo A Flores. *Foreign Law: Current Sources of Codes and Basic Legislation in Jurisdictions of the World* (Rothman 1989).

⁵¹ This premise depended on the historical reality that state law had been imposed by conquest or colonization in a great number of countries. As pointed out inter alia by Deakin and Pistor, however, the historical independence of a country's legal family was a questionable assumption both for the parent country of each of legal family (ie the United Kingdom, France and Germany) and for voluntary adopters like Japan. Deakin and Pistor (n 10) xi.

⁵² La Porta and others, 'Law and Finance' (n 4) 1126; La Porta and others, 'The Economic Consequences of Legal Origins' (n 11) 286; Deakin and Pistor (n 10) xi.

⁵³ Milhaupt and Pistor (n 9) ch 1.

⁵⁴ *ibid* 5.

that good law is essential to good economic outcomes, but that when it comes to good law, 'one size fits all.'⁵⁵

III. Shleifer's Failures⁵⁶

The introduction of this chapter hinted at the breadth and depth of criticisms that have been levelled over the years against Legal Determinants and its cognates. In this part, I offer a closer reading of strands of that criticism. I do not think that by doing so I will put a final nail in the coffin of Shleifer's methods. After all, the text and subtext of this chapter are that theoretically credible methods and empirically valid findings only partly determine the success of a social scientific paradigm. It is nonetheless worth coming to terms with some of the fundamental critiques that have been levelled at Legal Determinants as a project of inquiry. By 'fundamental,' I refer to a set of critiques that went beyond the validity of Shleifer's particular data or the execution of his research design and critiqued instead the structure and tacit theory underlying that design. The broad constellation of literature that has affinities with Law & Finance cannot be neatly filed into the execution-sceptical or theory-sceptical boxes. I have, for example, given little attention in this chapter to a chain of studies that drew on entirely different data sets to advance a substantially different theory for the content of modern corporate law.⁵⁷ That being said, the distinction serves my purposes well enough in what follows. To succeed in my point about the consequences of Shleifer's studies, I need to draw out weaknesses that were not gratuitous features of the original Law & Finance studies and focus instead on issues raised by the shared theoretical concerns in the research they inspired.

Before getting into those theoretical weaknesses, I offer a summary of some other criticisms for contrast. Many of the critiques levelled against various aspects of the Law & Finance project amounted to reproofs of the validity or reliability of Shleifer's data.⁵⁸

⁵⁵ Below, text to n 116–120.

⁵⁶ cf Klick's conclusion that 'Shleifer's written a lot of good theory, just not here.' Klick (n 18) 902.

⁵⁷ See especially Raghuram G Rajan and Luigi Zingales, 'The Great Reversals: The Politics of Financial Development in the Twentieth Century' (2003) 69 *Journal of Financial Economics* 5; Mark J Roe, 'Legal Origins, Politics, and Modern Stock Markets' (2006–07) 120 *Harv L Rev* 462; Mark J Roe and Jordan I Siegel, 'Finance and Politics: A Review Essay Based on Kenneth Dam's Analysis of Legal Traditions in "The Law-Growth Nexus"' (2009) 47 *Journal of Economic Literature* 781.

⁵⁸ Davis summarizes these two concepts as applied to legal indicators in general as follows:

The analyses of legal effects in the initial Law & Finance studies were based on each country's ADRI, assigned on the basis of coding applied by a group of international lawyers. One strain of critique argued that the resulting data were unreliable: the coders, it seemed, had done a markedly bad job of applying the criteria underlying the variables.⁵⁹ With a set of corrected values, produced by a global team of lawyers each drawn from the bar of the country being coded, the correlations of the ADRI with both legal origins and financial development disappeared.⁶⁰ Similar concerns were raised about the accuracy of Shleifer's method to classify countries into legal families.⁶¹

Other criticisms pushed deeper, questioning not only the accuracy of the measurements in Shleifer's data, but the validity of what was being measured. Some argued that the Law & Finance literature was based on 'cherry-picked' doctrines.⁶² In particular, the ADRI and the securities law indices published in 2006⁶³ were castigated for 'hidden benchmarking' using a US model.⁶⁴ In some cases, criticisms were tied to key insights of comparative law. Critics worried that the original data accounted inadequately for functional equivalents,

First, there is disagreement about whether the indicators measure the concepts their names suggest they measure, or at least versions of those concepts that are useful for either testing theories or guiding policy. In other words, there are debates about legal indicators' validity. Second, whatever the indicators are supposed to measure, there is disagreement about the extent to which those measurements contain errors. That is to say, there are debates about legal indicators' reliability.

Kevin E Davis, 'Legal Indicators: The Power of Quantitative Measures of Law' (2014) 10 Annual Review of Law and Social Science 37, 41.

⁵⁹ See e.g. Udo C Braendle, 'Shareholder Protection in the USA and Germany - Law and Finance Revisited' (2006) 7 German LJ 257; and additional sources listed in Sofie Cools, 'The Real Difference in Corporate Law between the United States and Continental Europe: Distribution of Powers' (2005) 30 Del J Corp L 697, 701. As noted by Siems and Deakin, these were not just problems of reliable or accurate data: the vagueness of the original variable definitions made consistent coding impossible. Their definition did not even make clear how to deal with the difference between mandatory rules, default rules, and permissible practices. Siems and Deakin (n 17) 125–26; Priya P Lele and Mathias M Siems, 'Shareholder Protection: A Leximetric Approach' (2007) 7 J Corp L Stud 17, 21. Spamann, backed up by a large team of international lawyers, used a much more rigorous definition of the variables to essentially run a replication of Shleifer's original study. He found a very low correlation between the original and corrected values, with corrections required in 33 of the original 46 countries. Spamann, 'The "Antidirector Rights Index" Revisited' (n 47).

⁶⁰ Spamann, 'The "Antidirector Rights Index" Revisited' (n 47). Spamann also published research showing that key correlations in Shleifer's work on contract enforcement disappeared once errors were corrected. Holger Spamann, 'Legal Origin, Civil Procedure, and the Quality of Contract Enforcement' (2010) 166 Journal of Institutional and Theoretical Economics JITE 149. Notably, the data were in part corrected by the *Doing Business* project itself, whose indicators had been based on the data first collected by Shleifer (n 100, below).

⁶¹ Siems (n 29).

⁶² Nuno Garoupa and Carlos Gomez Liguerra, 'The Syndrome of the Efficiency of the Common Law' (2011) 29 BU Int'l LJ 287.

⁶³ Notably, Shleifer's work on securities law has not been integrated into the *Doing Business* project. Rafael La Porta and others, 'What Works in Securities Laws?' (2006) 61 Journal of Finance 1.

⁶⁴ Siems and Deakin (n 17) 125; Mathias M Siems, 'What Does Not Work in Comparing Securities Laws: A Critique on La Porta et Al.'s Methodology' [2005] ICCLR 300, s 3.1; Lele and Siems (n 59) 19–20.

both legal⁶⁵ and non-legal.⁶⁶ More problematically, some pointed out that individual rules could have differential effects depending on the context in which they were applied, raising questions about the weighting of the aggregate index.⁶⁷ The macro-context in which individual rules are applied means that formally equivalent rules may have divergent effects, and vice versa.⁶⁸ For instance, formal exposure to liability for negligence will matter to a greater or lesser degree depending on the standard of care implied by the local understanding of negligence.⁶⁹ Similarly, flexibility to dismiss workers depends not only on the formal law but on norms regulated through collective bargaining.⁷⁰

The validity of quantitative methods does not depend on their descriptive perfection in each case, as Spamann observes. There is a necessary trade-off between detail and accuracy for particular cases and the sizes of the overall samples. The magic of statistics is that, so long as samples are big enough and measurement errors are unbiased, inaccuracies in individual cases will not undermine the general validity of overall conclusions.⁷¹

However, although unbiased measurement errors do not undermine the validity of findings, the conclusions we can draw from the resulting data nevertheless depend on a set of assumptions about the structure of the systems from which those data are supposedly sampled and how they develop over time. If the systems are modeled in the wrong way, or if errors are made about the relationship between the data and the systems they are used to represent, then it is not enough to simply correct the data. Entirely different methods are needed.

⁶⁵ Ralf Michaels, 'Comparative Law by Numbers? Legal Origins Thesis, Doing Business Reports, and the Silence of Traditional Comparative Law' (2009) 57 Am J Comp L 765, 777–79; Siems (n 64) s 3.3.

⁶⁶ Siems (n 64) s 3.3; Lele and Siems (n 59) 23–24; Michaels (n 65) 778.

⁶⁷ Beth Ahlering and Simon Deakin, 'Labor Regulation, Corporate Governance, and Legal Origin: A Case of Institutional Complementarity' (2007) 41 Law & Soc'y Rev 865, 867, 884–85.

⁶⁸ Milhaupt and Pistor (n 9) 20–21; cf Siems (n 64) s 3.2. Others expressed a similar concern by invoking the distinction between 'law in the books' and 'law in action.' See Michaels (n 65) 776–77.

⁶⁹ Siems (n 64) s 3.2.

⁷⁰ Ahlering and Deakin (n 67) 883–84.

⁷¹ Spamann, 'Large-Sample, Quantitative Research Designs for Comparative Law' (n 41). cf Ahlering and Deakin, who make the related point that failure to account for case law as well as legislation only matters for general claims if the gap varies *systematically* across subgroups. Ahlering and Deakin (n 67) 882–83.

A. The Economy as Self-Contained System

I need to take a further step back and look at the Legal Determinants paradigm at an even more fundamental level. By drawing from a shared strain of positivist, quantitative method, namely applying linear regression to cross-sectional data and chasing causation using an instrumental variable, each Legal Determinants study contributed to an overarching mode of thinking about the object of study. The contribution of those methodological as much as, if not more than, the particular ways in which Shleifer's data were collated and combined.

Statistics can be used in a variety of ways. We might want to understand the structure of variation in certain characteristics of a population. We can use statistics to show, quite reliably, that human males weigh more on average than human females or that there is a positive link between weight and height. Note that there is real variation in the measured variables, and thus in the relation between them. Knowing someone's height means that we can guess their weight better than we could without that information, but any 'correlation' between height and weight is a population-level characteristic. That correlation has no meaning for the individual person. The individual simply has the combination of features that they have.

We can also use statistics to study the nature and behaviour of a self-contained system.⁷² The state of a self-contained system at any given moment can be thought of as a set of factors or characteristics, some of which are representable by a collection of measurable variables. A system is *self-contained* insofar as the values of those variables at a given point in time is determined by, or at least strongly dependent on, their values in the past. The linear pendulum is a useful archetype. Taking the pendulum as a self-contained system, we could use statistical methods to help us overcome ignorance about the structure of the relationship between its characteristics and to mitigate the consequences of measurement error. While a great number of forces and interactions at a variety of levels contribute to a pendulum's locus of movement,⁷³ there is, within some small margin of error, a determinate relationship between the pendulum's position, velocity,

⁷² I have deliberately avoided using 'closed' system, in large part because I want to avoid any implication that Shleifer's models share any sensibility with Luhmannian systems theory.

⁷³ For example, the weak and strong nuclear forces are acting between the atoms of the ball and of the string, and gravitational forces, though we may think of it as acting on the pendulum per se, is actually acting on every atom of the pendulum and the string.

and the sum of the forces acting to accelerate it. There may not be a one-to-one correspondence between the variables (a pendulum at a given height may be at one of two horizontal locations), but the relationships between the variables are still highly structured and can be captured using closed-form mathematical formulae.

Treating each country as a self-contained system was a central feature of the Legal Determinants studies. The investigation of causation in their model was based on the notion that the system's characteristics, like the pendulum, had a discernible temporal structure. The models fundamentally depend on the idea that values of a set of variables at some arbitrary point in time would have a meaningful and substantial effect on those characteristics and variables at a later point in time.

Describing a system as self-contained does not mean it must be treated as hermetically sealed. Shleifer's intervention turned entirely on the possibility that the system could be perturbed by some outside impetus, or 'shocks.' Factors external to the system could intervene and exceptionally change the state of one or more factors. Or an exogenous factor could provide a continuous impetus to those factors. Thus, modelling a pendulum as a dynamic system does not logically require assuming that its path of motion can never be changed. To be able to say how the pendulum will respond if certain variables are externally manipulated, it must also be possible to manipulate those variables.

Finally, statistics can be used to understand the nature, structure, and behaviour of a whole category of things, including dynamic systems. So long as instances of a category possess a sufficiently similar structure, statistical techniques can sample from that population to tell us a great deal about the internal structure of individual cases. Imagine we wanted to understand the behaviour and characteristics of pendulums in general. We can do so much better using statistics than we could by just drawing out correlations between characteristics in the population as a whole. With enough data points, and some good mathematical intuition, we can use measurements taken from a collection of pendulums to model the relationship between key characteristics of any particular pendulum. If we do so however, it will be useful to distinguish between parameters, which are static for a particular instance, and state variables, which track internal changes to a single system over time.

This, above all, was the analytical aspiration of Legal Determinants. In order to take variable data from multiple countries and draw general conclusions about how a set of

variables will evolve together over time in any one country, one must assume that the countries are approximately equivalent *except for* differences in the measured factors. There must no system-relevant factor that differs significantly between countries other than those included in the model. Put another way, there must be no factor that makes the structure of the dynamic relationship between the variables differ from one country to another. Just think of how misleading our results would be if we tried to draw conclusions about the behaviour of one-weight pendulums from a population that included double pendulums. In other words, drawing such conclusions requires that all relevant factors be captured in measured variables.

B. Narrow National Frame

Legal Determinants placed a narrow focus on the national context. These studies did not address how the interaction between countries, the structure of the international system, or changes in these factors over time might affect their findings.

A number of related points are to be made here. One issue, concerning only the original Law & Finance papers, is the treatment of money and finance as national phenomena, and thus of financial aggregates in each country as independent of those aggregates in others. On some questions, such independence is more than plausible. For example, there is no good reason to believe, and good reason not to believe, that the time it takes to resolve a bankruptcy in one country has any systemic link with the time it takes in others.⁷⁴

Yet, many measures of financial development are logically linked to supply-side factors. In the early papers, Shleifer's focus was on the amount of financing that investors make available. Important questions exist about what factors determine the hard limits to the amount of financing available to investors. 'Investment' is not a static quantity of stuff that can simply either be allocated in the form of bonds and equity to firms or left within the household. There are intrinsic limits to the amount that investors can and will entrust to the corporate sector, regardless of how well investors are protected. Shleifer et al tried to account for these limits by including results scaled by local GDP levels, on the assumption that lower incomes in a country would intrinsically reduce the amount available for investment. Since the late 1970s, however, the global financial regime has been biased against any kind of capital controls. Without making the strong claim that

⁷⁴ Djankov and others, 'Debt Enforcement around the World' (n 8).

international financial flows actually affected the validity of their results, it is at least worth asking how the de facto internationalization of finance might have shaped their findings, especially in how it has made it much easier for local investors to take their money elsewhere.⁷⁵

This is linked to a broader point. The Legal Determinants paradigm modelled the economic and legal conditions in an individual country as a particular point in the variable space that can be used to represent the prevailing conditions in any state. Different countries at different points in time are, per the model, simply at different points in that variable space. But the potential role of foreign investment in shaping global distributions of financial development suggests that understanding dynamics within one country depends on the value of variables in other countries. What drives financial practices in one country may be not only its own laws, GDP or other local factors, but financially-relevant conditions prevailing in other countries as well.

In that context, a model based on the internal dynamics of a closed system that is subject to occasional shocks does not suffice. Understanding what is happening locally means either developing a model of how law, economic practice, and financial development proceed together on a global scale or amending the model for individual countries to include a set of variables capturing key features of the international system over time.⁷⁶ The same point can be applied in a narrower way, one that is closer to routine legal concerns. The significantly greater level of international financial flows and foreign direct investment during the 1980s and 1990s as compared to the immediate post-war period is not simply an artefact of changing proclivities of global investors. Rather, it reflects a significant transformation in the international regime governing financial flows over a comparable period.⁷⁷

When legal and economic conditions in each country are modelled as a sampling of parameters and state variables from a single type of self-contained system, the necessary corollary is that the poorer countries today will be placed near to the past conditions of today's richer countries. Setting aside the internal factors that differentiate the present

⁷⁵ cf John C Coffee Jr, 'Future as History: The Prospects for Global Convergence in Corporate Governance and Its Implications' (1998–99) 93 Nw U L Rev 641.

⁷⁶ Of course, this would be impossible to integrate into the cross-sectional data from the original studies.

⁷⁷ See eg Rawi Abdelal, *Capital Rules: The Construction of Global Finance* (Harvard University Press 2007); Eric Helleiner, *States and the Reemergence of Global Finance: From Bretton Woods to the 1990s* (Cornell University Press 1994).

of today's poor countries from the past of today's richer ones, the most obvious difference is that today's poor countries exist in the present rather than the past. In particular, they exist in a present that is shaped not only by conditions in today's richer countries, which no past country had to contend with, but also by all the changes in the international order and its rules and regimes, even for those countries with smaller or less financially developed economies.

The final irony of ignoring international dimensions in trying to understand the dynamics of legal and economic change at the local level arises from the keystone of Law & Finance, namely the use of 'legal origins' as an instrumental variable. Legal origins was only valuable to Shleifer and his collaborators because the legal orders of most countries around the world have been significantly shaped by conquest, colonialism, and the intense borrowing of laws and legal traditions from elsewhere. The explanatory strength of Legal Determinants, in other words, depended on the notion that laws and legal values can flow across borders, just as money can. Yet, in its details, their model also depended on ignoring the borrowing, imposition, and transplantation that had happened in the interim, since otherwise their causal model would be too corrupted to be credible.

C. Oversimplification of Legal Effects

Jurists are renowned for insisting that the effects and significance of law are complicated. Law's baroque and occasionally arcane structures are the consequence of efforts to balance interests, weigh countervailing principles at various levels of specificity, and respond to side effects and unintended consequences of higher-level settlements.⁷⁸

Many of the criticisms levelled against the Legal Determinants project were informed by indignation at the idea of reducing law to a single aspect or effect. Law, these critics insisted, has a rich fabric, with each provision and rule having a constellation of meanings. Law has not only causal consequence, they said, but expressive value. Legal provisions can only be properly understood against the background of the legal culture within which they operate. The approach to law in Legal Determinants, it was said, is ultimately reductive.⁷⁹

⁷⁸ Robert W Gordon, 'Historicism in Legal Scholarship' (1981) 90 Yale LJ 1017, 1034–35.

⁷⁹ Pierre Legrand, 'Econocentrism' (2009) 59 U Toronto LJ 215; Vivian Grosswald Curran, 'Comparative Law and the Legal Origins Thesis: *[N]on Scholae Sed Vitae Discimus*' (2009) 57 Am J Comp L 863.

If, however, our interest is limited to the causal effect of legal change on economic practice and economic macro-variables, then these criticisms may be beside the point.⁸⁰ There is an argument to be had about whether law should be crafted instrumentally to improve economic macro-variables, but the claim that law has other functions, richer meanings, or a more complicated existence is irrelevant when the question is whether certain legal provisions or practices can be expected to have a given economic effect.

That being said, it is nevertheless valid to argue that legal changes will tend to have a multiplicity of effects and to treat such questions as the basis for scepticism about the practical conclusions of Shleifer's findings. As explored in Chapter 2, most legal changes can be expected to have an immediate effect both on allocative outcomes—the size of the pie, as it is sometimes described—and on distributive outcomes—how big a slice everyone gets. Many of Shleifer's studies explored the effect of legal changes on numerous dependent variables. He was aware that laws could have numerous effects, but nevertheless chose not to evaluate the degree to which legal changes might involve trade-offs, increasing some development-relevant variables while decreasing others.

Shleifer and his team ignored that it is possible to have too much of a good thing. The linear model driving their studies structurally implied that a higher (or lower) value of a legal indicator would always correspond to an increase or decrease in the relevant dependent variables. Underlying the original Law & Finance articles is a fundamentally relational vision of law. He portrayed law not simply as a matter of command or instruction, but as a norm that governs the relationship between two parties, shaping both their expectations and their behaviour. The operative theme is balance. The ideal of corporate governance underlying their model is not one that empowers external investors to interfere in every management decision, or to wholly expropriate the returns of other stakeholders, but rather one in which every stakeholder can reasonably trust that they will get a fair portion of the surplus. Thus, if we could imagine shareholder protections being ranked or measured by the degree to which they empower or provide rights to investors, under this model we would expect the optimum value of any relevant variable to be struck at some happy medium, and not at the extremes.

⁸⁰ Michaels (n 65) 789.

In statistical terms, the linear model by construction fails to take into account non-linearities in the regressors. Setting aside the additional complications identified below, it might be that for most countries, an ADRI score of four out of six would be the best level for the ADRI. Yet in a world in which most countries were already at four, a linear model which by design could not distinguish between a movement from one to two and a movement from five to six would happily recommend that all countries amend their laws to grant investors ever more protection, far past the optimal level.

D. Neglect of Context

Thus, even if we assume that all countries can be captured by the same variable space—the same collection of linked random variables—the use of linear models to capture those links can get us into various kinds of trouble. Non-linearities are only part of the problem.

Think of the pendulum again. As it moves through space, it also draws a curve through a variable space that might include, for example, the weight of the pendulum and the length of the string holding it; the forces it is subject to (gravity plus the pull of the string); its location (vertical and horizontal), velocity (speed and direction) and acceleration (rate and direction); and the period or frequency of its swing. Very few of the relations between these variables can be described by linear equations. Within a very small neighbourhood of a given point, it is possible to approximate the change in one or more variables as a linear function of changes in the others. A slight change in the horizontal location, for example, will correspond to a proportional change in the vertical. However, the validity of the resulting linear relation between the two quickly diminishes as you move away from that point. If you nonetheless take the approximation to be a universal truth about the whole system, your predictions will be simply wrong, and sometimes disastrously so. For example, during half of the pendulum's swing, an increase in the vertical location corresponds to a move to the right; in the other half, it corresponds to a move to the left. If you were to take a random sampling of measurements and use a linear model to estimate the relationship between these two variables, the correlation you would expect to find between the two variables would be zero, since that is the average relationship between them. How changes in vertical and horizontal positions relate to each other, in other words, depends on context, that is, the value of other variables. In statistical terms, the concern here is that there may be interactions between the regressors, such that the

effect of one regressor on any dependent variable cannot be disentangled from the effect of the others.

No doubt, Shleifer's early results attempted to integrate some of these interactions by using intuitive assumptions to weigh key variables. Many of the variables were scaled by population, or by current GDP, essentially including a multiplicative term rather than a simple linear combination. The intention was to compare apples to apples, and to thus put the focus on the same 'neighbourhood' so that linear models would make sense. These models did not however think in terms of the interaction between legal variables—or between institutions. This is a problem because there are important reasons to think that the effects of legal variables on economic practices and, indirectly, on economic outcomes are not self-sufficient; that these effects are not, in statistical terms, independent. To the contrary, there is quite a strong case that successful policy under capitalism may depend on how institutional factors are combined, rather than just their presence or intensity.⁸¹ It is intuitive that giving investors more power and, by the same token, a larger portion of the pie would increase measures of finance's presence and importance in an economy. But the choice not to account for interactions between institutional variables (or the inability to do so given their chosen tools and methods) may explain why Shleifer et al could not causally link any of their legal indicators to GDP growth.⁸² What works, legally speaking, may be a function not only of international context but of a broader collection of national conditions—institutional, legal, and political—as well.⁸³

Finally, we can imagine that we are trying to understand the behaviour of pendulums in general—pendulums of different weights, with strings of different length—rather than just a single pendulum. If we sample relevant variables from a large collection of pendulums without accounting for variations in their weight and string length but instead imagine all the measurements are taken from the same 'system,' then we might, for example, end up with conclusions that are dominated by the pendulums with longer strings.

⁸¹ In recent years, the *locus classicus* of this claim has been Peter A Hall and David W Soskice (eds), *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage* (Oxford University Press 2001).

⁸² La Porta and others, 'The Economic Consequences of Legal Origins' (n 11) 301–02.

⁸³ Above, text to nn 67–70.

E. Causal Naiveté

Though a pendulum in motion is a system that changes over time, a pendulum with specified parameters embodies a statistical and mathematical relationship between the state variables. In particular, save for the intervention of external or exogenous forces and within a margin of approximation, all future values of those variables are determined by their present values, so long as the conditions constituting the system do not change.⁸⁴ Given enough information about the present value of those variables, their future value can be reliably predicted. In mathematical terms, a pendulum is both ergodic and stationary. In some sense, the behaviour of the system can be fully captured in a time-independent way.

However, there are many dynamic systems, even basic ones, where the relationships between the variables cannot be easily captured, or captured at all, in stable, time-independent, or ergodic terms. The models popularized under the heading of 'chaos theory,' the most famous being the 'Mandelbrot set,' have incredibly simple specifications but nonetheless exhibit long-term or aggregate behaviour that cannot be usefully captured in any simple statistical terms or mathematical formulae.⁸⁵ This contrast between the simple characteristics of some systems and the complexity of their behaviour is not unique to models carefully chosen by theoreticians but is a very common feature of real-world systems. In fact, even simple double pendulums are non-ergodic in this sense.

There are good reasons to believe that the interplay between law, institutions, economic practice, and political action are also non-ergodic. Changing a law dealing with corporate finance might have knock-on effects on the political coalitions that ultimately lead to worse investment conditions. A government that makes it easier to collect on debts may lose important members of its voting coalition, bringing to power a populist, protectionist government. Changing local labour laws might affect macroeconomic demand, so that short-term increase in formal hiring is followed by structural increase in informality.

⁸⁴ We have to assume that the string does not stretch, that the connection between the string and the pendulum does not decay, that there is no change to the gravitational forces acting on the system as a whole, etc.

⁸⁵ Mark J Roe, 'Chaos and Evolution in Law and Economics' (1995-96) 109 Harv L Rev 641, 642.

The point is not just that a change in laws or administrative practices will have side effects. The point is that the interaction between these complexities may be subject to feedback loops and critical junctures in ways that make the medium-term effects of any imposed changes on variables of interest contingent on, or highly sensitive to, initial conditions.

Some systems, conversely, exhibit a high degree of coupling in the development of key variables, which makes them resistant to exogenous change. In such systems, while an exogenous change to one variable can change variables of interest in the short term, any effect will be dominated in the long-term by an overall trend. The idea of legal-economic co-evolution stressed by Deakin partly accords with this premise where, absent any parallel changes in an economic and political environment, legal changes can be swamped and neutralized. Legal reform can fail to 'take.'⁸⁶

There is a long list of concepts from statistics and dynamical systems theory that seem likely to be relevant to national economies and the law and politics that govern them: lag, hysteresis, path dependency, feedback and, above all, endogeneity. I will not enter into the details of these concepts here. What these ideas point to, much like the discussion of coupling and non-ergodicity above, is that time may be a relevant variable in the development of a dynamic system, and may have significant impact on what causal effect an exogenous change in one variable might have.

F. Inadequate Accounting for Agency

There is an interesting metaphysical two-step analytical process that, while fundamental to modern social science research, becomes problematic when applied in the context of Legal Determinants. Speaking from the position of a neutral observer, data is wrangled together in an attempt to discern a pattern in the characteristics and behaviours of some putative system. Once deductions about a pattern are made on the basis of the data, the implicit epistemological posture of both scholar and audience changes. We no longer stand in the position of disengaged observer, interested in the autonomous behaviour of a system, but turn instead to affirmative statements about what will happen if some, often underspecified, actor intervenes in the system to change some variable or introduce some new factor.

⁸⁶ This phrasing follows a medical usage of a graft or vaccine being successful, see Trubek (n 40) 54.

This switch in perspective is entirely unproblematic in many contexts. Once we know enough about how a pendulum works, we can absolutely draw conclusions about how it will behave if we set variables directly (dropping it from a certain horizontal and vertical position) or if we nudge it in one direction or another. Even stochastic systems, where behaviour follows probabilistic rather than deterministic paths, might have predictable if not determinate responses to small changes to variables.

One reason this works is because a pendulum's behaviour has a time-invariant nomothetic structure. That is, while the relationship between variables may change through time, the structure of their relationship does not. I have already pointed above to some of the ways in which this assumption may be unseated when it comes to national economies existing in an international system that is itself in flux. It assumes that the nomothetic structure of relationships between past and present variables will necessary continue to structure the relationship between present variables and future variables. Put in systemic terms, this depends on time not being a relevant factor other than as a parameter that links the causal relationship between the variables.

However, the passage from a set of stylized facts about what has apparently followed in 'countries where X has occurred' (in the past) to general claims about what happens in 'countries that do X' in general to what will happen in the future 'if countries do X' in particular, engages in an under-theorized crossing of the boundary between autonomous historical process and active political agency.

There are two possible ways of thinking about what is going on here. In one perspective, political actors and political dynamics are wholly endogenous to the system. This was largely the perspective that Shleifer later adopted in his attempt to elaborate a more robust theoretical underpinning for the connections he found between legal and economic variables, which came to be called Legal Origins Theory.⁸⁷ Roughly speaking, this approach is based on an appreciation of the continual interaction between systemic factors. Political interests and legislators may exercise some agency, but those effects are ultimately subsumed within larger socio-legal dynamics that produce the state of the law at a given point in time. An alternate perspective would be that political action works as an exogenous factor that can override or counteract the forces that shaped past trends.

⁸⁷ Text to n 25-27.

In this view, political actors exercise agency largely independent of historical constraints, with those changes capable of acting as a driver of relevant economic change. The problem with the second perspective is that it belies the basic structure of Shleifer's model. The entire basis of the argument that underlies most Legal Origins, across all but one of the studies, is that a legal tradition imposed or imported between 100 and 400 years ago can act as a significant constraint on the law-making powers of political actors and the legislature.⁸⁸

The paradox is this: either legislators have the power to create salutary laws, regardless of context or the state of local political economies, in which case the causal argument has no logical basis; or legislators *are* significantly constrained by local political economies, including local legal traditions, which renders moot the question of what would result if they had acted differently.

There are straightforward ways out of this impasse. For instance, local political actors may enter into coalitions with international organizations to achieve political ends that they could not win on the basis of local dynamics alone.⁸⁹ This is where the real problem lies. The presence of international actors that were, per assumption, not present in the prior dynamics disrupts the conclusions that can be drawn about how the system will respond. This is quite different from giving the pendulum a little nudge. No matter the validity of the causal reasoning about a past relationship between legal order, local politics, and economic structure, such reasoning will be irrelevant to understanding the dynamics that will result if there is a change in the origins and identity of the actors exercising a 'demand for law.'⁹⁰

IV. How Shleifer Matters

This part explores how Law & Finance has shaped real world policy practice. Though scholars have often made strong claims about the real-world relevance of Law & Finance,

⁸⁸ Notably, Shleifer's article on corporate taxation, which became the background paper for the *Doing Business* 'Paying Taxes' indicator (below, n 100), did not find any meaningful correlations between tax rules and legal origins. Its causal claims were apparently based on no more than an a priori intuition. Simeon Djankov and others, 'The Effect of Corporate Taxes on Investment and Entrepreneurship' (2010) 2 *American Economic Journal: Macroeconomics* 31.

⁸⁹ cf John Ohnesorge, 'Legal Origins and the Tasks of Corporate Law in Economic Development: A Preliminary Exploration' [2009] *BYU L Rev* 1619, 1622-23.

⁹⁰ Katharina Pistor, 'The Demand for Constitutional Law' (2002) 13 *Constitutional Political Economy* 73; Daniel Berkowitz and others, 'The Transplant Effect' (2003) 51 *Am J Comp L* 163.

vindicating those claims requires qualitative, empirical research that has so far not been done by scholars. One exception shows clear evidence of Law & Finance's intellectual pedigree: the World Bank's *Doing Business* project. While the real-world consequences of Law & Finance via *Doing Business* await robust investigation, a preliminary review of some intriguing episodes provides the strongest case that Law & Finance had an effect that went beyond purely speculative policy discussions.

A. Legal Determinants at the World Bank: The *Doing Business* project

The clearest evidence of Shleifer's ideas escaping the confines of the ivory tower is the way in which the Legal Determinants paradigm came to shape the design and implementation of the World Bank's *Doing Business* project.⁹¹ The *Doing Business* project is one of the Bank's 'flagship' programs.⁹² In basic structure, the project collates data on eleven legal indicators for over 180 countries.⁹³ Since the second report in 2005, those indicators have been aggregated into an annual *Doing Business Index* (DBI), creating a running 'league table' on business climate that allows comparison, functionally, between all countries in the world.⁹⁴

Beyond a noted 'intellectual affinity' between *Doing Business* and the Legal Determinants paradigms, the former is more properly seen as a collaboration between Shleifer's research team and World Bank staff.⁹⁵ It is true that the methods underlying many of the *Doing Business* indicators borrow from de Soto's work in the late 1990s to quantify the cost and time burden of particular areas of economic regulation.⁹⁶ Yet, Shleifer's influence goes much deeper than the wholesale adoption, highlighted by some, of a quantified comparative 'investor protection' measure.⁹⁷ Shleifer and his co-authors have

⁹¹ The project has an extensive and informative website: <www.doingbusiness.org>. Its most recent published report is World Bank, *Training for Reform: Doing Business 2019* (World Bank 2018).

⁹² The cover of the annual report describes it as 'A World Bank Group Flagship Report.' *ibid.* At least at one point, it was the Bank's highest-circulation publication. Michaels (n 65) 765.

⁹³ The 2004 report included only five indicators, and covered only 145 countries. Over the years, the Bank has created new indicators and made numerous amendments to indicator definitions.

⁹⁴ Ohnesorge (n 89) 1625. The Employing Workers indicator is no longer used as part of the calculation of the DBI, but is still calculated for all countries. *ibid.* 1626–27; Michaels (n 65) 773.

⁹⁵ For 'intellectual affinity,' see Aguilera and Williams (n 12) 1426.

⁹⁶ de Soto (n 6); Ohnesorge (n 89) 1625.

⁹⁷ Ohnesorge (n 89) 1624–27. As noted above (n 47), the *Doing Business* project's Protecting Investors indicator was not based on the ADRI developed in 'Law and Finance.' It was, however, based in part on work developed by Shleifer, as discussed below (n 100).

characterized the *Doing Business* project as an extension or application of the data project they launched.⁹⁸ Shleifer provided the original intellectual reference points for the project and continued to provide academic advice to the *Doing Business* team until at least 2011.⁹⁹ He is also the co-author of eight articles that together largely define the methodology for seven of the eleven *Doing Business* indicators.¹⁰⁰

Shleifer's involvement has seldom attracted attention in the extensive critiques and reviews of the content, genesis, and legacy of the *Doing Business* project. The bare fact that the research projects shared personnel among one another is less relevant than the nature of their deep intellectual connections.¹⁰¹ Though the linkage between the Legal Determinants paradigm and the *Doing Business* project are well-known,¹⁰² attention to the nature of the linkages has been slight.¹⁰³ John Ohnesorge, for instance, stressed a shared policy agenda, noting that '[s]tripped of its technical overlay, the Legal Origins [sic]

⁹⁸ La Porta and others, 'The Economic Consequences of Legal Origins' (n 11) 325.

⁹⁹ See World Bank, *Understanding Regulation* (World Bank & Oxford University Press 2004) vii; World Bank, *Making a Difference for Entrepreneurs* (World Bank & International Finance Corporation 2011) 206.

¹⁰⁰ The 'Starting a Business', 'Enforcing a Contract' and 'Employing Workers' indicators, all in use since 2004, are based respectively on Djankov and others, 'The Regulation of Entry' (n 6); Djankov and others, 'Courts' (n 7); Botero and others (n 5). The 'Resolving Insolvency' Indicator (originally the 'Closing a Business' indicator) is based on methods published in Djankov and others, 'Debt Enforcement around the World' (n 8). The 'Getting Credit' indicator was originally based in part on the methods in La Porta and others, 'Law and Finance' (n 4) but was later amended to integrate the methods published in Simeon Djankov and others, 'Private Credit in 129 Countries' (2007) 84 *Journal of Financial Economics* 299. The 'Protecting Investors' indicator, introduced in 2005 and changed to 'Protecting Minority Investors' in 2015, is based on Djankov and others, 'The Law and Economics of Self-Dealing' (n 47). The 'Paying Taxes' indicator, introduced in 2006, is based on Djankov and others, 'The Effect of Corporate Taxes on Investment and Entrepreneurship' (n 88). Of the four other indicators, one is based on research published by one of the principals of the *Doing Business* and Shleifer's frequent co-author, Simeon Djankov: Simeon Djankov and others, 'Trading on Time' (2010) 92 *The Review of Economics and Statistics* 166. The 'Registering Property' indicator is not directly based on any published work, but has clear links with De Soto's work on registering property (above, n 96). The other two indicators, 'Getting Electricity' and 'Dealing with Construction Permits', are also not based on published research, though the method for the former has been published as a World Bank working paper. See generally 'Data Notes' in World Bank, *Doing Business 2004* (n 99) 107–14; World Bank, *Doing Business 2019* (n 91) 73–125. See also Methodology <www.doingbusiness.org/en/methodology> and Changes to Methodology <www.doingbusiness.org/en/methodology/changes-to-the-methodology> on the *Doing Business* project website.

¹⁰¹ Some studies have noted that the projects have shared personnel, though none has noticed Shleifer as the golden thread. Alvaro Santos, 'Labor Flexibility, Legal Reform, and Economic Development' (2009–10) 50 *Va J Int'l L* 43, 56; Michaels (n 65) 771; Milhaupt and Pistor (n 9) 20.

¹⁰² Aguilera and Williams (n 12) 1425–28; Deakin and Pistor (n 10) x; John Armour and others, 'Law and Financial Development: What We Are Learning from Time-Series Evidence' [2009] *BYU L Rev* 1435, 1436, 1438, 1447–48, 1498; Siems and Deakin (n 17) 122. Most of these observations seem based on Shleifer's claiming of credit for the consequences that Legal Determinants (qua 'Legal Origins') has had via the *Doing Business* project, in La Porta and others, 'The Economic Consequences of Legal Origins' (n 11) 325.

¹⁰³ Ménard and du Marais give an extended treatment to how the correlations investigated by the Legal Determinants studies were given a 'normative gloss' by the *Doing Business* project, but their review fails to account for important conceptual distinctions, undermining the validity of their conclusions. Ménard and Marais (n 17).

message on corporate law and economic development, propagated via *Doing Business*' champions development through private investment, allocated through financial markets, which in turn is dependent on 'vigorous protections for minority shareholders.'¹⁰⁴ Aguilera and Williams suggested that Shleifer's research 'provided intellectual support for a complex of policy prescriptions ... considered important in allowing financial markets to flourish, [including] ... clear property rights ... freedom of contract ... protections for outside investors and outside senior creditors.'¹⁰⁵ Santos characterizes *Doing Business* as the 'translation into policy of a theoretical claim generated by ... the "legal origins" literature ... that regulation in common law countries is more efficient ... than in civil law countries.'¹⁰⁶ Michaels emphasizes the Bank's adoption of the premise that 'the common law is more conducive to economic growth' than the civil law, and suggests that the *Doing Business* reports gave the 'legal origins thesis a distribution forum.'¹⁰⁷ In France, the country's low initial ranking on the DBI, and the framing of many arguments in the 2004 report in terms of differences between legal families, got the country, and especially its legal community, up in arms over the unique value of the French legal tradition.¹⁰⁸

There is an old joke about a guard hired to watch a construction site experiencing a rash of thefts. Every night, the guard stops a worker exiting the site with a wheelbarrow full of refuse. Despite a thorough search, the guard always finds the man isn't carting anything of value. After a few days of this, the guard gets a call from his boss, who is livid. 'Are you completely blind?' his boss yells. 'You've been here less than two weeks and somehow we've had ten wheelbarrows stolen!' My argument is that to ignore the contribution of the 'technical overlay' of Shleifer's studies to the *Doing Business* project is, in essence, to miss the wheelbarrows. While it is true that in the 2004 *Doing Business* report, differences in legal origin were a key theme,¹⁰⁹ after 2004, differences between legal traditions disappeared as a relevant factor in the reports.¹¹⁰

¹⁰⁴ Ohnesorge (n 89) 1625 (emphasis added).

¹⁰⁵ *ibid* 1625–26; Aguilera and Williams (n 12) 1425.

¹⁰⁶ Santos (n 101) 54–56.

¹⁰⁷ Michaels (n 65) 771–72.

¹⁰⁸ Benedicte Favuarque-Cosson and Anne-Julie Kerhuel, 'Is Law an Economic Contest? French Reactions to the *Doing Business* World Bank Reports and Economic Analysis of the Law' (2009) 57 *Am J Comp L* 811; Catherine Valcke, 'The French Response to the World Bank's "*Doing Business*" Reports' (2010) 60 *U Toronto LJ* 197.

¹⁰⁹ 'Legal origin' appears 152 times in the 2004 report. World Bank, *Doing Business 2004* (n 99).

¹¹⁰ There have been occasional sightings of the distinction between legal systems. The difference between common law and civil law systems was mentioned as the reason for certain procedural choices in reports

Let me draw out the key connection taken for granted by these other critiques. Shleifer's paper is distinctive not due to his conclusions but the methodology he used to support them. Aguilera and Williams mention it but only in passing: *Doing Business* was 'based in significant part on [Shleifer's] methodology for quantifying law.'¹¹¹ It is true that Shleifer's studies accorded with views previously espoused by the World Bank,¹¹² and his findings not only concurred with the emphasis that the Bank had been placing on private-led (foreign) investment as an engine of growth, but they also reflected more broadly the Washington Consensus fixation with getting markets to operate correctly.¹¹³ But *so did a great deal of other research* at the time. Shleifer's findings may have reinforced some themes about the proper forms for regulatory apparatuses in developing states, but the Bank did not get these conclusions solely from the Legal Determinants studies.¹¹⁴

Rather, what the *Doing Business* project got from Shleifer, which the Bank could not get anywhere else, was a set of measurable benchmarks tied to specific legal norms. This is patent in the introduction of the first *Doing Business* report published in 2003. Prior projects that attempted to link regulatory practice to development outcomes failed to convince because they were founded on subjective judgements rather than objective

between 2008 to 2013. The common law / civil law distinction was mentioned offhand in relation to Rwandan legal reforms in 2013. 'Common law' was used as a synonym of judge-made law in 2011, and in 2005 and in 2015 the common law tradition was distinguished as the source of a particular approach to, respectively, contract enforcement and property registration. Legal origin was mentioned twice in 2014 in reference to studies still relying on DB as an instrumental variable. 'Common law,' 'civil law,' 'legal family' and 'legal origin' appeared in other cases in the reports for these years, and none at all in the reports for 2006, 2007, and 2017–2019.

¹¹¹ Aguilera and Williams (n 12) 1426.

¹¹² Milhaupt and Pistor (n 9) 20.

¹¹³ Kerry Rittich, 'Core Labor Rights and Labor Market Flexibility: Two Paths Entwined?' in Permanent Court of Arbitration (ed), *Labor Law beyond Borders: ADR and the Internationalization of Labor Dispute Settlement* (Kluwer Law International 2003); David Kennedy, 'The "Rule of Law," Political Choices and Development Common Sense' in David M Trubek and Alvaro Santos (eds), *The New Law and Economic Development: A Critical Appraisal* (Cambridge University Press 2006); John Williamson, 'A Short History of the Washington Consensus' in Narcís Serra and Joseph E Stiglitz (eds), *The Washington Consensus Reconsidered: Towards a New Global Governance* (Oxford University Press 2008).

¹¹⁴ There is one exception here. As I have discussed above (text to nn 34–37), Shleifer's embrace and promotion of active regulatory intervention to the benefit of shareholders was a departure from the economic orthodoxy of the time. On the other hand, in accordance with the turn toward institutions and the institutional foundations of markets entailed in a moment of 'chastened neoliberalism' in development orthodoxy, the Bank had already in a very significant way taken up projects aimed at improving the legal underpinnings of markets. Kennedy (n 113); Kerry Rittich, 'The Future of Law and Development: Second-Generation Reforms and the Incorporation of the Social' in David M Trubek and Alvaro Santos (eds), *The New Law and Economic Development: A Critical Appraisal* (Cambridge University Press 2006); Chantal Thomas, 'Law and Neoclassical Economic Development in Theory and Practice: Toward an Institutional Critique of Institutionalism' (2010–11) 96 Cornell L Rev 967. Research remains to be done to determine to what degree, if any, the timing of the international development community's embrace of positive, pro-investor legal regulation would have been different without Shleifer's contributions.

assessments. As a result, they were fuzzy and imprecise about the rules and practices being assessed, and ‘reformers [were] left in the dark.’¹¹⁵

The preface to the 2004 *Doing Business* report was informed above all by the message that, when it comes to business regulation, ‘one size can fit all.’¹¹⁶ There are some slight deviations from that theme over the years, and the phrase itself may have disappeared from subsequent reports, but the sentiment has endured.¹¹⁷ As noted above, Shleifer’s later, more theoretical work diverged sharply from the conclusion that institutional forms should or could take any one shape.¹¹⁸ While it is no surprise that Shleifer and his colleagues have not ‘openly endorsed’ the one-dimensional technical-instrumental application of their ideas by the World Bank, that is beside the point.¹¹⁹ The Legal Determinants studies used statistical methods to empirically tie specific legal reforms to desirable economic outcomes. By reverse engineering those results, the Bank was able to endorse those specific legal reforms in service of those economic ends. One theme explored further in Part V below is that the Legal Determinants approach lent the *Doing Business* outputs credibility, a certain ‘scientific patina.’¹²⁰ However, it is important to emphasize that this appearance of scientific neutrality, objectivity, and technicality to specific reforms applied to any and all countries. The causal inference of the Legal Determinants paradigm allowed the *Doing Business* to claim it had something valid to say about all countries. In other words, it was the quantification of legal rules and administrative practice that allowed *Doing Business* to be quite specific about what the universal ‘one size’ regulatory model should be.

B. Has *Doing Business* mattered for Legal Reform?

The affinities between Legal Determinants and the *Doing Business* project matter because the *Doing Business* project shaped law and practice in individual countries in real and substantial ways. Along with another set of ‘governance’ indicators adopted by the World

¹¹⁵ World Bank, *Doing Business 2004* (n 99) 1; Kevin E Davis and Michael B Kruse, ‘Taking the Measure of Law: The Case of the Doing Business Project’ (2007) 32 *Law & Soc Inquiry* 1095, 1098–99.

¹¹⁶ World Bank, *Doing Business 2004* (n 99) xvi.

¹¹⁷ The authors hedge on this point occasionally, such as when they admit ‘reform options are not the same across rich and poor countries.’ Yet, when push comes to shove, the report emphasizes that, ‘when it comes to the manner of regulation, one size often fits all (in many cases there really is one best practice).’ *ibid* xviii, xvi.

¹¹⁸ Text to n 27.

¹¹⁹ cf Milhaupt and Pistor (n 9) 226, n 6.

¹²⁰ Santos (n 101) 56; Milhaupt and Pistor (n 9) 20.

Bank, the *Doing Business* project might count as the 'original sin' that shifted a large body of scholarly interest toward the study of (legal) indicators as a form of (global) governance.¹²¹ This scholarship suggests that the *Doing Business* project has an implicit logic of governance, manifest in three modes.

In the first mode, *Doing Business* has been characterized as just the latest iteration of international development work in a tutelary register. Though the primary output of the *Doing Business* project is a comparative set of quantitative indicators regarding legal regulations, the extensive information concerning the calculations underneath the individual indices allows the output to be reverse-engineered, thereby allowing the indicators to function as a detailed form of reform advice. Whatever practice would produce a high score on any of the indicators was identified as a 'best practice.' In this way, *Doing Business* works as a form of governance as it allows duly informed local policymakers to pursue strategies identified as most likely to achieve desirable ends. Even without explicit efforts to motivate the index-improving reforms that were offered in each annual report, the implicit advice baked into the indicators works as governance in the high-modern mode, whereby enlightened experts tell policymakers how to achieve their development goals.¹²²

In the second mode, other observers focus on the impact of the rankings in the *Doing Business* Index, not the individual indicators.¹²³ The rankings hold the interest of scholars concerned with the degree to which the *Doing Business* project allows countries to be compared.¹²⁴ Because the ranking permits a direct comparison between countries, it foments competition between countries and local policymakers.¹²⁵ Such competition could be imagined as a matter of relative prestige and reputation of countries and of policymakers themselves. But a more instrumental logic exists, because the rankings provide a World-Bank accredited signal to the international investment community. This

¹²¹ See below, text to nn 165–173.

¹²² Nils Gilman, *Mandarins of the Future: Modernization Theory in Cold War America* (Johns Hopkins University Press 2003); James C Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (Yale University Press 1998).

¹²³ Bjørn Høyland and others, 'The Tyranny of International Index Rankings' (2012) 97 *Journal of Development Economics* 1.

¹²⁴ Dimitri Van Den Meerssche, 'International Organizations and the Performativity of Measuring States' (2018) 15 *International Organizations Law Review* 168.

¹²⁵ Sam Schueth, 'Winning the Rankings Game: The Republic of Georgia, USAID, and the Doing Business Project' in Alexander Cooley and Jack L Snyder (eds), *Ranking the World: Grading States as a Tool of Global Governance* (Cambridge University Press 2015) 151.

is quite different from pursuing administrative practices or legal rules thought to be best for local economic development, regardless of what other countries do. Rather, the rankings foster an international race to the top in a competition for implicitly scarce international investment capital. The substance of any legal reform matters only insofar as it influences the outcome of that race. Economic development, understood this way, becomes above all a function of international investment levels. *Doing Business* governs by encouraging countries to change their policies and practices in order to communicate their attractiveness to investors.

A third, more coercive mode lurking in the *Doing Business* project is one in which the Index is made part of the calculus that determines the terms and eligibility of developing countries for international development aid, including from the World Bank itself.¹²⁶ As much has been written about how *Doing Business* works as a strategy, site, or channel of governance, such arguments have rested on a thin account of how much *Doing Business* actually matters. Nominally speaking, local policymakers have access to a plethora of sources about international best practices.¹²⁷ They also have access to a variety of alternative strategies to attract international investment, including other international rankings of their investment climate, both private and public. Governance that works 'at a distance' rather than through threat or force has a distinct disadvantage. Subjects of that governance have to believe that there are consequences to participation, albeit indirect. Governance based on the provision of expert advice depends on the authority and credibility of its authors, on its relative availability compared to other advice, on the degree to which it meets the needs and priorities of its audience. There are good reasons to doubt that no matter the sums spent on *Doing Business*, we cannot guess from its design or its logic that it would convince local policymakers to change any practices that may impact on *Doing Business* indicators or on an individual country's ranking.

Rather, knowing whether *Doing Business* matters requires closely scrutinizing the empirical evidence. Extant evidence generates difficulties of both confounding

¹²⁶ There is *some* statistical correlation between reforms captured by the *Doing Business* reports and the subsequent lending decisions of the World Bank and other multilateral lenders, but no significant correlation between DBI ranking and aid. Jason Webb Yackee, 'Foreign Aid, Law Reform, and the World Bank's *Doing Business* Project' (2016) 9 *The Law and Development Review* 177. On the other hand, as of 2016, the Bank may have formally banned the use of *Doing Business* data in lending decisions. *ibid* 194.

¹²⁷ There is, by contrast, wide variation in the actual access policymakers have to information on international policy, due in part to resource constraints.

interpretation and complex causation.¹²⁸ The *Doing Business* project has trumpeted its successes in the form of hundreds of changes across dozens of countries that it claims were ‘informed or inspired by’ the project, though the meaning of ‘informed or inspired’ is not defined. Despite claims that the impact of *Doing Business* has been ‘remarkable,¹²⁹ any independent and in-depth studies of the effects over its first decade and a half were ‘scant.’¹³⁰ The gold standard might be a quantitative study of whether legal and administrative changes across countries have tracked the kinds of rules and practices measured by the *Doing Business* indicators. With so many confounding factors to account for, doing so would be daunting, to put it mildly.

A small number of case studies address both the reasons given by policymakers for changes in policy and administrative practice that they pursue, as well as the actual changes undertaken. Here, the evidence is striking. In a cross-section of countries studied, policymakers from the highest officials down have, in official discourse and internal discussions, named the *Doing Business* indicators and a country's ranking on the DBI, as a motivation for a swath of policy actions. Academic literature and journalistic accounts offer some rich and highly informative cases of this influence. Country officials explicitly state their intentions to pursue courses of action that will improve their DBI, and government bodies have been established with mandates to pursue reforms inspired by *Doing Business*.¹³¹ There have been multiple cases of countries pursuing business law and public administration reforms making at least a rhetorical connection to the *Doing Business* project.¹³² Singapore, which has topped the DBI for most of the fifteen years of

¹²⁸ Riegner, for example, points out that reforms pursued in Georgia (discussed below, text to nn 134–136), had ramifications not only on the country's *Doing Business* scores, but also for the World Bank's Country Policy and Institutional Assessment, which is used in the Bank's aid allocation decisions. Michael Riegner, ‘Governance Indicators in the Law of Development Finance: A Legal Analysis of the World Bank's “Country Policy and Institutional Assessment”’ (2016) 19 *Journal of International Economic Law* 1, 5–6.

¹²⁹ Luca Enriques and Matteo Gargantini, ‘Form and Function in *Doing Business* Rankings: Is Investor Protection in Italy Still So Bad’ (2016) 1 *U Bologna L Rev* 1, 6–7. As evidence of the influence of DB, Enriques and Garagantini cite a report authored by one of the *Doing Business* project leads, and the *Doing Business* Independent Review Panel report.

¹³⁰ Lin Lin and Michael Ewing-Chow, ‘The *Doing Business* Index on Minority Investor Protection: The Case of Singapore’ (2016) 2016 *Sing J Legal Stud* 46, 47.

¹³¹ For the case of Sri Lanka, see Clare Fisher Williams, ‘What Can ESL Offer to the Data Collector: Describing, Defining, Designing and Deploying an Alternative ESL Approach Special Issue: Continuing towards an Economic Sociology of Law’ (2014) 65 *N Ir Legal Q* [i], 65–66.

¹³² For Tanzania and Bulgaria, see Michal Lyons and Colman Titus Msoka, ‘The World Bank and the Street: (How) Do “Doing Business” Reforms Affect Tanzania's Micro-Traders?’ (2010) 47 *Urban Studies* 1079, 1084–85; Michal Lyons and others, ‘Do Micro Enterprises Benefit from the “Doing Business” Reforms? The Case of Street-Vending in Tanzania’ (2014) 51 *Urban Studies* 1593, 1597; Benito Arruñada, ‘How Doing Business Jeopardises Institutional Reform’ (2009) 10 *European Business Organization Law Review* 555, 562.

the project's existence, is notable for the breadth of coordination and the depth of resources that have been poured into maintaining its ranking.¹³³ The most telling case, however, is Georgia. In the first *Doing Business* report, published in 2004, Georgia was ranked 100 (out of 155 countries); by 2010, it had moved up to 11 (out of 183). Its rank in 2018 is 6.¹³⁴ As documented by Sam Schueth, this jump in rank was no coincidence. Rather, since 2004, the country's leaders have chased reforms that, as much as possible, used the DB indicators to guide reforms.¹³⁵ Once those efforts had successfully driven up their ranking, millions were spent advertising the high score in print in the Wall Street Journal, Economist, and the Financial Times, as well as with televised ads on CNBC.¹³⁶

Despite these cases, though, the evidence of direct effect is not overwhelming. There are multiple confounding factors, and there has been no sober reckoning of whether changes pursued in the name of *Doing Business* have actually 'stuck' and 'taken' in the sense of formally persisting in the medium term and actually shaping business practice and administration. Any causal argument is harder still. One can ask to what degree *Doing Business* has served as a political alibi for changes that would have occurred anyway? There are widespread worries that countries have gamed the system, pursuing reforms that make little difference in practice while making big dents in DBI scores.¹³⁷ Nevertheless, it is becoming hard to argue that *Doing Business* has not mattered at all.

V. Explaining Shleifer's Influence at the World Bank

By now it should be possible to see an outline of the puzzle motivating this chapter. Despite its theoretical weaknesses and the wide-ranging methodological drubbing, the Legal Determinants paradigm has seen levels of theoretical uptake and a degree of practical application seldom dreamed of by most legal scholars.

What makes ideas successful? How do models of the world end up being integrated into law's economic imaginary? Why is one set of models and methodologies taken up as a

¹³³ Lin and Ewing-Chow show that policymakers in Singapore have continually reshaped law and administrative practice as part of conscious and deliberate efforts to maintain top ranking on the DBI. Lin and Ewing-Chow (n 130).

¹³⁴ Schueth (n 125) 183; World Bank, *Doing Business 2019* (n 91).

¹³⁵ Schueth (n 125) 152–53, 163–67, 167–78.

¹³⁶ *ibid* 172–73.

¹³⁷ 'How the Big Emerging Economies Climbed the World Bank Business Ranking', *The Economist* (3 November 2018) <www.economist.com/finance-and-economics/2018/11/03/how-the-big-emerging-economies-climbed-the-world-bank-business-ranking> accessed 27 February 2019.

standard, while others wither? More pointedly, why do bad ideas—incoherent, inaccurate, and incomplete—succeed? What factors led the World Bank, or at least particular formations within the Bank, to adopt Shleifer’s data, methods, overarching claims, and intellectual leadership? I turn now to these questions.

I begin with four sections addressing the potential role played by four factors, each of which would inevitably have to be integrated into any robust reconstruction of the episode: ideology; epistemic communities, professions, and the sociology of intellectual networks; the geopolitical constraints on the World Bank as a policy actor; and the seductive power of quantification in policy matters. My overall point in this chapter is not that these non-epistemic factors were irrelevant. Quite to the contrary, in the final section of this part, my arguments for the causal relevance of the methodological technicalities of Legal Determinants point to the ways in which that relevance depends in many places on the presence of these other factors.

A. Politics and the Spectre of Ideology

A great deal of ink has been spilled criticizing the details of the proposals espoused by the *Doing Business* project.¹³⁸ Many people have objected to its vision of the world, the policy repertoire, the standards of evaluation, the ordering of priorities, and the implied distributive consequences promoted by the *Doing Business* project. It is possible (with some effort) to convert some of these critiques into causal arguments that could, if proven correct, shed light on why the World Bank adopted Shleifer’s ideas rather than others.

One explanation might be that particular individuals inside the World Bank had a preference for a type of policy reforms, sharing a particular vision of how societies should be organized. In this view, what made Shleifer’s early work attractive was how well his conclusions accorded with these policy priors. Shleifer’s conclusions furnished consequentialist justification for labour market deregulation, reduced regulatory oversight, and measures to increase financial market power and lower taxes.¹³⁹ The explanatory factor here might be described as the power and preferences of neoliberals at the Bank.¹⁴⁰

¹³⁸ See especially the discussion of the ‘Employing Workers’ indicator, above, Introduction, n 14.

¹³⁹ Botero and others (n 5); Djankov and others, ‘The Regulation of Entry’ (n 6); Djankov and others, ‘The Law and Economics of Self-Dealing’ (n 47); Djankov and others, ‘The Effect of Corporate Taxes on Investment and Entrepreneurship’ (n 88).

¹⁴⁰ Schueth (n 125) 152.

A more common, subtler version of this argument skirts individual motives and indeed avoids referring to individuals entirely. The explanatory factor here is development common sense.¹⁴¹ Such analyses recognise that individuals have preferences for particular kinds of policies, but they place their explanatory emphasis on the perspectives viewed by a community as neutral and the solutions that can appear to be technical rather than political.¹⁴² Marxist strains of this argument go further, arguing that perspectives take hold because they are in the interests of economic elites.¹⁴³ Viewed through this lens, the World Bank appears to be little more than a vehicle of a political project, the institutional embodiment of prevailing development ideology. Viewed this way, Shleifer's work is arguably attractive not because it fulfils any group's self-conscious political project, but because it matches a prevailing worldview. Thus, it is not neoliberals who are to be credited with making Shleifer at home in the World Bank, but (legal) neoliberalism.¹⁴⁴

Clearly, ideology matters. Shleifer's theory is highly compatible with the global reproduction of American institutional settlements and the use of the American present as the presumptive standard for global best practices. The assumptions underlying his methods are neoclassical, and his prescriptions are neoliberal. In both their earlier and later incarnations, Shleifer's recommendations accorded with a preference for market-supporting rather than policy-implementing reforms in developing countries. However, this observation does little to explain why Shleifer's model, techniques, and data were placed front and centre in the *Doing Business* project. There were plenty of other economists to choose from who were saying that markets were good and needed to be institutionally supported. Why Shleifer?

B. Networks, Narrow Self Interest, and Force of Habit

Another factor in diagnosing Shleifer's influence is the role of professional networks, communities of interest, and social formations like disciplines and sub-disciplines. The

¹⁴¹ Kennedy (n 113).

¹⁴² Tor Krever, 'Quantifying Law: Legal Indicator Projects and the Reproduction of Neoliberal Common Sense' (2013) 34 *Third World Quarterly* 131, 132. The importance of the technical-political divide is also addressed below, text to nn 158-161.

¹⁴³ *ibid* 133.

¹⁴⁴ Krever (n 142).

points here bridge what was traditionally labelled as the sociology of knowledge and what is today described as international knowledge politics or the politics of expertise.¹⁴⁵

Lawyers may be leery about accounts that attribute causal relevance to the actions and identity of individuals, but it is worth confronting the ways in which important economic, political, and even legal outcomes may relate to the identities and communities of key players.¹⁴⁶

One version of this approach is 'great man' historiography, which ascribes historical salience to the virtues and visions of individual leaders, emphasizing the force of internal individual characteristics. However, the salience of individuals in historical processes also has a more sociological hue, where the analytical canvas encompasses the relationship between the individual and the context.¹⁴⁷

Sometimes if we want to understand behaviour in a certain setting, it helps to ask who knows who. It could be that Shleifer was influential at the World Bank because he was already integrated into global networks of power and influence, including some of the most powerful figures in American politics, academia, and international development.¹⁴⁸ However, it is not necessary to invoke conspiratorial old-boys' networks or corrupt practices of 'favours for favours' to make this point. No matter Shleifer's intrinsic competence, his success with the *Doing Business* project was probably partially attributable to the operation of something like the Matthew effect.¹⁴⁹ Having already been granted a leadership role in a multi-million dollar project to oversee the creation of

¹⁴⁵ David Kennedy, *A World of Struggle: How Power, Law, and Expertise Shape Global Political Economy* (Princeton University Press 2016); Annabelle Littoz-Monnet (ed), *The Politics of Expertise in International Organizations: How International Bureaucracies Produce and Mobilize Knowledge* (Routledge 2017).

¹⁴⁶ In saying that lawyers are not fond of accounts that attribute cause to individual actors, I only have in mind that there is a conflict between the ideal in liberal legalism of a neutral, anonymous law, or an instrumentally functional law, and the premise that law exists only because of a narrow, parochial interests.

¹⁴⁷ One good example would be Weber's account of charismatic power.

¹⁴⁸ Sara Ivry, 'Did an Exposé Help Sink Harvard's President?', *The New York Times* (27 February 2006) <<https://www.nytimes.com/2006/02/27/business/media/did-an-expose-help-sink-harvards-president.html>> accessed 4 December 2018; David McClintick, 'How Harvard Lost Russia', *Institutional Investor* (13 January 2006) <<https://www.institutionalinvestor.com/article/b150npp3q49x7w/how-harvard-lost-russia>> accessed 4 December 2018.

¹⁴⁹ The Matthew effect, coined by sociologist Robert Merton, identifies the tendency in some social systems for growth factors to be more effective in elements that are larger; for example, people who are already famous are more likely to get opportunities which maintain or increase their fame. It refers to the Bible, Matthew 25:29, roughly: 'For to every one who has will more be given, and he will have abundance; but from him who has not, even what he has will be taken away.' Merton's particular hypothesis was that rewards would be allocated to scientists based on their existing prestige, and that this would materially affect what knowledge got produced and how it was distributed. Robert K Merton, 'The Matthew Effect in Science: The Reward and Communication Systems of Science Are Considered' (1968) 159 *Sci* 56.

securities markets in Russia, Shleifer's attachment and integration into another large project may have had at least something to do with who knew him or knew about him, rather than the details of what he believed or what he claimed he could show.¹⁵⁰

Inquiry into the relationship between the causal and constitutive aspects of group membership can be addressed at higher levels of abstraction and track broader social networks. Explanatory techniques move in both directions here. Individual motivations can be explained by reference to membership in the group, and the group's continuing existence can be explained in part through actions of members that reproduce the group and maintain its boundaries. One of the most striking aspects of Shleifer's success is that although the Legal Determinants paradigm and Legal Origins theory together represented a disciplinary breakthrough for comparative law and for other legal subfields, credit for the breakthrough is due not to jurists but to a group of economists.¹⁵¹ The economist's methodological tools (namely, comparative statistics, linear regressions, formal modelling) were precisely what made the Legal Determinants project so attractive. Lawyers and economists, however, are distinguished not only by their methodological tools but also by their professional networks, by culture, and by what Bourdieu called *habitus*.¹⁵² Battles have been fought over what ideas get implemented and what approaches to problem-solving are adopted, manifesting as conflicts over who gets a say in policy-making.¹⁵³ A growing line of research seeks to explain policy agendas at the international level as reflective of power conflicts between competing national traditions, epistemic communities, bureaucratic groupings, and other groups of 'people with projects.'¹⁵⁴ A less sophisticated version of this line of inquiry would posit that

¹⁵⁰ For details regarding Shleifer's role in Russia, see Maxim Boycko and others, *Privatizing Russia* (MIT Press 1995); McClintick (n 148).

¹⁵¹ Michaels (n 65) 765; Christopher A Whytock, 'Legal Origins, Functionalism, and the Future of Comparative Law' [2009] *BYU L Rev* 1879, 1880.

¹⁵² Karin Knorr Cetina, 'Epistemic Cultures: Forms of Reason in Science' (1991) 23 *History of Political Economy* 105; Susan S Silbey, 'Legal Culture and Legal Consciousness' in Paul B Baltes (ed), *International Encyclopedia of the Social & Behavioral Sciences* (Pergamon 2001); James Boyd White, 'Economics and Law: Two Cultures in Tension' (1986-87) 54 *Tenn L Rev* 161; Pierre Bourdieu, *Outline of a Theory of Practice* (Richard Nice tr, Cambridge University Press 1977).

¹⁵³ Pierre Bourdieu, 'The Force of Law: Toward a Sociology of the Juridical Field' (1986-87) 38 *Hastings LJ* 814.

¹⁵⁴ See, for interactions with national practices Nikolas M Rajkovic and others (eds), *The Power of Legality: Practices of International Law and Their Politics* (Cambridge University Press 2016); with bureaucratic groupings: Alvaro Santos, 'The World Bank's Uses of the "Rule of Law" Promise in Economic Development' in David M Trubek and Alvaro Santos (eds), *The New Law and Economic Development: A Critical Appraisal* (Cambridge University Press 2006); with disciplinary formations: Galit A Sarfaty, *Values in Translation: Human Rights and the Culture of the World Bank* (Stanford University Press 2012) 75-105; Yves Dezalay and Bryant G Garth, *The Internationalization of Palace Wars: Lawyers, Economists, and the Contest to*

battles over policy frames and their corresponding reform agendas are reducible to power conflicts between expert communities. What existing research indicates instead is that, at minimum, the politics of legal reform, especially as it interacts with the international system, is not reducible to the mediation of interests of those whose rights will be directly implicated by the laws and policies that are implicated. Rather, understanding legal reform depends on paying attention both to the foibles and limitations of bottom-up law-making and to the politics of expertise, not to mention the economics involved in trying to implement 'efficient' divisions of intellectual labour.¹⁵⁵

C. Geopolitical Context and the Governance Agenda

In the previous section, I mentioned bureaucratic groupings as a possibly salient locus of the politics and economics of reform agendas. We should not focus on such bureaucratic groupings at the expense of institutions themselves as both sites and actors. Given that my inquiry is not about influence in the abstract, but about the influence of the World Bank in particular, I should address one aspect of the conditions of possibility that allowed the World Bank to embrace specific advice about substantive legal reform in the first place.

Those less versed in the history of development orthodoxies or the practice of the World Bank may miss how big a change it was for the World Bank to be giving advice about legal systems at all. The Cold War significantly circumscribed the practices of the World Bank until the 1990s. During most of its first 45 years, the Bank's effective capacity to push any reforms in recipient countries was limited by the presence of the USSR as an alternative funding source. With the dissolution of the Soviet Union, the emboldened funders of the World Bank urged the tying of funding to political reforms, in line with a broader retreat in the international sphere from the principle of non-interference in the internal affairs of sovereign states.¹⁵⁶ These pressures increased the importance of internal constraints

Transform Latin American States (University of Chicago Press 2002); between 'academics' and 'activists': Annelise Riles, '[Deadlines]: Removing the Brackets on Politics in Bureaucratic and Anthropological Analysis' in Annelise Riles (ed), *Documents: Artifacts of Modern Knowledge* (University of Michigan Press 2006); see generally Kennedy (n 145) for the role of 'people with projects' in constituting global order.

¹⁵⁵ cf the broad literatures on the comparative advantages of organizing dispute resolution under the auspices of judges or regulators, and whether laws are better designed in terms of hard-line rules or discretionary standards, eg Edward Glaeser and others, 'Coase Versus the Coasians' (2001) 116 *The Quarterly Journal of Economics* 853; Louis Kaplow, 'Rules Versus Standards: An Economic Analysis' (1992) 42 *Duke LJ* 557.

¹⁵⁶ Van Den Meerssche (n 124) 176–77.

on the Bank's reform activities. Its reputation and authority depended largely on its ability to credibly abide by the constitutional prohibition in its founding treaty against interfering in the 'political affairs' of its members.¹⁵⁷ As a matter of institutional sociology, actors at the Bank faced a deadlock of international and institutional politics, with top management strongly supporting reform facing a Board resistant to any entrée into the domestic political affairs of members.

In a coup of legal innovation, the Bank radically redrew the boundary around 'the political' as a category relevant for dispensing loans or the development of policy advice.¹⁵⁸ Rejecting anything like a constitutional division of powers based on areas of legitimate competence, the Bank adopted a doctrine that expanded the boundaries of the non-political to include any issue that could be described as 'technical.' What became relevant to the legitimacy of Bank activities was not whether they involved questions of policy per se, nor whether they addressed decisions traditionally made by domestic authorities, nor whether they impinged on politically sensitive or controversial topics, but only whether they were based on expert judgment.¹⁵⁹ In the place of a concept of 'economic considerations' that were constrained and delimited by the possibility of local controversy, disagreement, or a clash of values, the resulting doctrine shrunk the proscribed area of political activity to include only those questions that could not be answered by reference to established expertise concerning its economic effects.¹⁶⁰ The presence of conflicting considerations was not relevant.¹⁶¹

¹⁵⁷ *ibid* 177–78. International Bank for Reconstruction & Development, Articles of Agreement, art. IV, § 10 (1989) states 'The Bank and its officers shall not interfere in the political affairs of any member ... Only economic considerations shall be relevant to their decisions;' see also *ibid*, art. III, § 5(b), which states 'The Bank shall make arrangements to ensure that the proceeds of any loan are used ... with due attention to considerations of economy and efficiency and without regard to political or other non-economic influences or considerations.'

¹⁵⁸ *ibid* 178–79.

¹⁵⁹ The key document was a legal memorandum authored by the Bank's General Counsel, Ibrahim Shihata, largely reproduced in Ibrahim FI Shihata, 'The World Bank and "Governance" Issues in Its Borrowing Members' in Franziska Tschofen and others (eds), *The World Bank in a Changing World* (M Nijhoff Publishers 2000).

¹⁶⁰ As Van Den Meerssche emphasizes, what is most striking about the Shihata doctrine was not its content, but that it was so effective. Van Den Meerssche (n 124) 179.

¹⁶¹ It is common in the critical literature on the Bank to argue that the Shihata doctrine characterized economic expertise as neutral, and therefore was not 'political.' *ibid* 177, 179, 180; Tor Krever, 'The Legal Turn in Late Development Theory: The Rule of Law and the World Bank's Development Model' (2011) 52 *Harv Int'l LJ* 287, 318. Neutrality, however, appears nowhere in Shihata's opinion. It might be more accurate to say that Shihata shifted the definition of 'non-political' for the purposes of evaluating Bank actions away from neutrality and toward 'technicality.'

The result was that the Bank could promote any kind of legal or institutional reform, provide funding for such reforms, tie funding to the pursuit of such reforms, and turn a significant portion of its research toward such reforms. Of course, the Bank still had to worry about criticisms concerning the content of the proposed reforms or its research findings. But provided the reforms or investigations were presented as technical expertise and objective knowledge about economics, it no longer had to worry that pursuing a governance agenda would trigger internal political drama or constitutional crises.

D. The Seductions of Quantification

In short, it was the technical objectivity of Shleifer's methods that made them instrumentally attractive to the World Bank. Yet many would argue that Shleifer's methods —not just empirical, but both quantitative and objective—also made them *intrinsically* attractive. Here, we enter the realm of the sociology of knowledge and its interactions with institutional sociology, where such questions cannot be reduced to conflicts of interest or logics of resource optimization.

On the one hand, the practical success of Shleifer's methods may have much to do with the intellectual success of the Legal Origins project. Davis long ago suggested that the intellectual success of a theory turns on the leveraging of the counter-intuitive: the theory must in some way generate the frisson that comes with contradicting one or more of the baseline assumptions of its intended audience.¹⁶² Intellectual dynamics are in part mediated by aesthetics not reducible to epistemic values.¹⁶³ The Legal Determinants paradigm seemed to hit both notes at once, offering elegance in its underlying argument and novelty in its fundamental claims.¹⁶⁴

¹⁶² Murray S Davis, 'That's Interesting!: Towards a Phenomenology of Sociology and a Sociology of Phenomenology' (1971) 1 *Philosophy of the Social Sciences* 309.

¹⁶³ On the role of aesthetic values, especially 'elegance' in scientific conduct, see e.g. Hilary Putnam, *The Collapse of the Fact/Value Dichotomy and Other Essays* (Harvard University Press 2002) 135–46; Cassey Lee and Peter L Lloyd, 'Beauty and the Economist: The Role of Aesthetics in Economic Theory' (2005) 58 *Kyklos* 65.

¹⁶⁴ This claim needs a small word of motivation. As already noted (text to nn 111–114), Shleifer's support for markets and market institutions was hardly novel. Yet the attempt to distinguish the efficiency of national laws on the basis of their legal traditions was a clear innovation, as can be discerned in how much those results bothered both national legal communities and comparative law scholars.

Another point that needs making is that quantification is seductive.¹⁶⁵ The recent fascination among legal scholars with indicators as a mode of (global) governance has spurred research on what makes indicators attractive.¹⁶⁶ Indicators simplify, commensurate, clarify, and provide a basis of comparison between otherwise quite different contexts.¹⁶⁷ They ‘reduce uncertainty by collecting, organizing and classifying information in accordance with pre-established frameworks.’¹⁶⁸

The power of numbers lies in the impression of objectivity. Quantified measurements ideally appear rule-bound, rigorous, uniform, and explicit.¹⁶⁹ Because, by some definitions, the objective is precisely identifiable with the non-controversial¹⁷⁰—it is observable, prior to interpretation, and beyond disagreement—quantified measures are also implicitly taken to be not only technical but also, to a significant degree, apolitical. Nonetheless, there is an economics to quantified measures, as formal methods provide economies of scale to information production.¹⁷¹ But there is also a politics to them.¹⁷² They facilitate forms of governance that disclaim political content, presenting interpretation as fact because the form of interpretation that is employed is consistent.¹⁷³

¹⁶⁵ Sally Engle Merry, *The Seductions of Quantification: Measuring Human Rights, Gender Violence, and Sex Trafficking* (The University of Chicago Press 2016).

¹⁶⁶ Indicators have received increased attention from legal scholars over the last ten years. Kevin E Davis and others, ‘Indicators as a Technology of Global Governance’ (2012) 46 *Law & Soc’y Rev* 71; Kevin E Davis and others (eds), *Governance by Indicators: Global Power Through Quantification and Rankings* (Oxford University Press 2012); Sally Engle Merry and others (eds), *The Quiet Power of Indicators: Measuring Governance, Corruption, and Rule of Law* (Cambridge University Press 2015); Richard Rottenburg and Sally Engle Merry, ‘A World of Indicators: The Making of Governmental Knowledge Through Quantification’ in Richard Rottenburg and others (eds), *The World of Indicators: The Making of Governmental Knowledge Through Quantification* (Cambridge University Press 2015). By most definitions, however, it is not clear how indicators are distinct from the practice of statistics, which is a tradition of governing with numbers that stretches back to the seventeenth century. Nehal Bhuta and others, ‘Introduction: Of Numbers and Narratives—Indicators in Global Governance and the Rise of a Reflexive Indicator Culture’ in *The Palgrave Handbook of Indicators in Global Governance* (Palgrave Macmillan, Cham 2018).

¹⁶⁷ Tim Büthe, ‘Beyond Supply and Demand: A Political-Economic Conceptual Model’ in Kevin E Davis and others (eds), *Governance by Indicators: Global Power Through Quantification and Rankings* (Law and global governance series, Oxford University Press 2012) 29; Wendy Nelson Espeland and Mitchell L Stevens, ‘Commensuration as a Social Process’ (1998) 24 *Annual Review of Sociology* 313.

¹⁶⁸ Katharina Pistor, ‘Re-Construction of Private Indicators for Public Purposes’ in Kevin E Davis and others (eds), *Governance by Indicators: Global Power Through Quantification and Rankings* (Law and global governance series, Oxford University Press 2012) 165.

¹⁶⁹ Theodore M Porter, *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life* (Princeton University Press 1995) 5–6.

¹⁷⁰ Porter points to an idea of objectivity as consensus *ibid* 3–4.

¹⁷¹ Pistor, ‘Re-Construction of Private Indicators for Public Purposes’ (n 168) 166.

¹⁷² Büthe (n 167).

¹⁷³ Pistor argues that quantified measures obstruct critique and the investigation of claims by presenting them as “‘facts” that speak for themselves.’ Bhuta, Malito and Umbach point out that while quantification may displace and transform the politics of governance, mechanical objectivity cannot eliminate it. Pistor, ‘Re-Construction of Private Indicators for Public Purposes’ (n 168) 166; Bhuta and others (n 166) 1–5.

The intrinsic objectivity of quantitative measures made Shleifer's methods attractive, but his methods also offered a mechanical objectivity that surpassed an earlier generation of measures.¹⁷⁴ During the 1990s, the World Bank Institute developed synthetic measures of 'institutional quality' that were then linked to economic outcomes.¹⁷⁵ However, the Bank's judicial reform projects were generally based on thin 'conventional wisdom' rather than thick understandings of the relationship between courts and economic practice or local needs,¹⁷⁶ and they ended with few measurable successes.¹⁷⁷ Meanwhile, the Bank's 'governance indicators,' based on survey data and numerical questionnaires filled out by experts, were criticized for their alleged biases, subjectivity, and unreliability,¹⁷⁸ and, crucially, for failing to provide a reference point or standard for reform.¹⁷⁹ Shleifer's studies, by contrast, offered a precisely-specified mechanism for measuring, one that seemed to escape the lingering accusations of subjectivity that had shadowed these earlier measurement projects.¹⁸⁰

E. The Causal Contributions of Theory: Attending to the Technicalities

Notwithstanding the importance of these institutional, political, and sociological factors, this chapter insists that effectively explaining the fortunes of knowledge practices—their development, diffusion, adoption, and abandonment—requires paying attention to the nature, structure, and content of the ideas themselves. Following leads that join science and technology studies to sociology of knowledge and critical legal methods, there is much to be learned from attending to the technicalities, in the words of Annelise Riles.¹⁸¹ My claim is that the most obvious, often presumed features of Legal Determinants played a causal role in their adoption by the World Bank and, by proxy, in the adoption of reforms that were based on their findings in a number of developing countries.

¹⁷⁴ 'Mechanical objectivity...means following the rules...rigorous method, enforced by disciplinary peers, cancelling the biases of the knower...valid conclusions.' Porter (n 169) 4. In introducing this concept, Porter warns that such rule following is no guarantee of truth. *ibid.*

¹⁷⁵ Santos (n 154) 281; Deakin and Pistor (n 10) ix; see e.g. Kaufmann and others (n 45).

¹⁷⁶ David M Trubek, 'The "Rule of Law" in Development Assistance: Past, Present and Future' in David M Trubek and Alvaro Santos (eds), *The New Law and Economic Development: A Critical Appraisal* (Cambridge University Press 2006) 282.

¹⁷⁷ *ibid* 284–85.

¹⁷⁸ Thomas (n 114) 1011; World Bank, *Doing Business 2004* (n 99) ch 1.

¹⁷⁹ World Bank, *Doing Business 2004* (n 99) 14.

¹⁸⁰ Above, text to n 115.

¹⁸¹ Riles (n 3).

Compared to earlier touchstones of market-valorising policy reform, ideas about how time unfolds and the actors and structures which relate cause to effect are central to Legal Determinants as an intellectual project. Yet it is the structure of the temporal claims and the mode of causal inference that marked out the fundamental weaknesses discussed above. It is precisely the features that made Shleifer's project weak as a matter of historiography that made it so powerful as an intervention in policy-making. For the sake of convenient exposition, I have addressed the practical value-added of the five weaknesses in the reverse of the order they appear above.

1. Making Room for Salutory Political Agency

A leap in logic may have been needed to conclude from certain legal changes inducing economic changes in the past to an affirmative statement that a country can affect those economic variables by implementing those same legal changes. What mattered for the *Doing Business* project was not whether the logical jump was sound, but where it landed. Although the metaphysical move in Shleifer's analysis (from a historical interpretation of the relationship between elements of a system to a predictive schema about the results of certain outcomes performed by indeterminate actors) may have been intellectually suspect, that move had a critical advantage.

The World Bank implicitly imagines development as a concatenation of distinct national projects. The tacit audience is individual countries. The Bank pursues its 'development' project through two activities: granting loans and producing research. The research is intended to be practical in particular ways. For instance, the Bank does not produce research that speaks to what unions should do or how corporations should conduct themselves. Its implicit audience is not political actors vying for power or economic actors deciding how to invest. Rather, the tacit audience of World Bank research is presumptively potent policymakers representing countries that are understood as unitary sovereigns. The Bank's research addresses 'the nation' only in the guise of a policymaker empowered to act on that research.

A theory of socio-legal change that frames economic outcomes as products of an autonomous co-evolutionary process between local legal, political, and institutional factors might have the advantage of capturing much more of the richness and complexity of actual legal change. The theoretical work in Chapters 2-4 gives a taste of the richness that such an approach can offer. It would, unfortunately, also be wholly worthless to a

tacit audience of policymakers. What use would it serve the Bank to inform someone charged with improving politically salient outcomes that their actions will ultimately be constrained by history and embedded in local institutional ecologies, legal tradition, and political equilibria?

Absolutely fundamental to Shleifer's attractiveness to the Bank was how easy it was to switch from the historical (X led to Y) to the normative (X leads to Y) to the advisory (if you do X ...). Putting Shleifer's work into practice did not, it turns out, require the Bank to tell countries what to do. It was enough that its research was presented in a way that was primarily of interest to national policymakers contemplating their own economic strategies.

2. Naïve Causation and Legal Simplification as Radio Dial Economics

If creating conceptual space for policy actors who were able to independently and successfully change variables was essential to meet the genre conventions of World Bank research, taking a simple approach to causation and legal effects allowed the Bank to promote a straightforward and uncomplicated vision of what would result from specific legal interventions.

This was important in two ways. First, given the foundation of World Bank authority and its constitutional validity, Shleifer's study pointed to specific, measurable economic outcomes.

By ignoring the multiplicity of law's effects, Legal Determinants enrolled law in a kind of radio-dial economics.

In general, the studies suggested simple changes in norms would have predictable effects on economic practices and, more importantly, on salient economic macro-variables.

Radio-dial economics relies on a linear, additive combination of variables and is based on a notion that one need not worry about institutional complementarities: you can pretend that a particular policy or rule will have the same positive or negative influence regardless of context, regardless of local geography, prevailing institutions, or political dynamics.

3. Neglect of Context as Universal Relevance

Shleifer's conclusions did much more, however, than say what linked legal and economic variables in *a* country. Like other international development institutions, the World Bank has published hundreds of reports applying a particular analytical frame to the economic situation in a given country and using the results of that analysis to propose agendas for reform.

It was not just that *a* country or some country could take the advice on offer about how to apply law to economic ends, but that *any* country could apply basically the same instrument to achieve the same ends, or could at least move any country in the same direction, with some margin for the scale of the change. The silver bullet removed any need to worry about context, history, or path dependency!

4. Narrow National Frame as Avoidance of (International) Politics

Sidestepping questions about international investment flows did not advance Shleifer's cause. International investors became the primary protagonists of development narratives in World Bank reports and documents through the 1990s. While the focus on private investment in LSSV 1997 and LSSV 1998 may have been welcomed, I have no reason to believe that treating financial development as a bottom up abstraction—as if relatively secure investment opportunities could generate their own demand—made Shleifer's early work more or less attractive.¹⁸²

That being said, what *was* a sine qua non for uptake by World Bank staff and management was a framing of development questions solely in terms of governance within a bounded, discrete national context. Especially poignant were the ways that it avoided engagement with questions of the justice, efficiency, or effectiveness of the international legal-economic order. Arguably, this bias was built into the constitutional DNA of the World Bank. Its bread and butter had long been one-off loans to individual countries. The balance of political forces between its funders and recipients made it unthinkable that it would provide funding for more internationally-structured reform projects.¹⁸³ In the 1990s, the Bank may have entered into issues previously regarded as off-limits for being too 'political.' The Bank's discussions of global political economy, however, were still

¹⁸² A more conspiratorial view would point out that, in ignoring international investment flows, the Bank did not risk challenging the prevailing orthodoxy about capital account liberalization, either.

¹⁸³ UNCTAD provides an interesting comparator here.

limited to encouraging individual countries to accept what that structure required, leaving unquestioned how particular iterations of the global order shaped what was possible at the local level, ignoring how that order had changed over time, and scrupulously avoiding any changes to that order as part of its policy research or advice.

The disregard of factors relating to the structure of the international system may have made Shleifer's analyses suspect from the perspective of reliable or robust social science. Yet, in following a long line of research in international development that framed local economic growth and social progress solely in terms of choosing from a limited repertoire of local policy options, Shleifer's techniques fell within the parameters that made it eligible to inform World Bank activities.

5. Summary and Consequences

These five characteristics of Legal Determinants conditioned its success with the World Bank and with domestic law-makers: its attribution of extraordinary power to local political actors; its flattening of the dimensions of policy analysis; its articulation of an abstracted non-place that purported to serve as a map for any country; a temporal framing in which legal change flowed unidirectionally into institutional changes; and wilful blindness about the international dimension of these processes. Each is connected to the partiality, inadequacy, and incoherence of the paradigm, yet, paradoxically, each also contributed to its success.

What do these characteristics offer? They allow an organization to provide the leaders of any country with a list of reforms that will have measurable and distinct salutary economic effects, regardless of local or historical context. From the organization's viewpoint, the success of a program that prioritized this kind of advice could be, and soon was, measured not on the basis of the promised economic gains but, more simply, in terms of how often local reforms 'inspired or informed' by the advice on offer were actually adopted.

VI. Conclusions

Gauged by the extent of its direct and identifiable effects, the *Doing Business* project is one of the most successful projects ever undertaken by the World Bank. This is not to suggest that the *Doing Business* project has contributed to development more than other Bank

projects. However, under the principles of project evaluation informed by the field of New Public Management, *Doing Business* is unparalleled. Dozens of countries have changed their laws, regulations, administrative practices, and civil procedures in explicit efforts to improve their *Doing Business* rankings.

Closer scrutiny reveals that the causal reasoning underlying the *Doing Business* measures are very flimsy. It is not simply that the data underlying the rankings are biased, unreliable, or invalid, though each of these may also be the case.¹⁸⁴ Nevertheless, it is hard to gauge how close to home those critiques hit, due to the continuous adaptations and amendments that have been made to the methodologies underlying the *Doing Business* indicators over the last fifteen years. Ironically, these methodological changes have disconnected the *Doing Business* measures from the only foundation in causal inference they ever had, namely Shleifer's Legal Determinants studies. The problem of causal inference would have existed even if the methodologies had endured over the years. For one, the tools of causal inference in the Legal Determinants studies were always quite weak and they depended on indefensible assumptions about countries and their legal systems. Worse, however, the strong involvement of the *Doing Business* project in legal reform processes creates a form of variable endogeneity that Shleifer's studies simply could not account for.

¹⁸⁴ No matter how valid or reliable the individual indicators may be, one thing is certain: the *rankings* produced by *Doing Business rankings* are, statistically speaking, completely unreliable. Simple statistical tests suggest that summarizing estimated scores through lexical rankings magnifies the impact of measurement error, combining superficial precision with high inaccuracy. For example: the probability that a country ranked in the top ten actually belong there runs as low as 10%. Høyland and others (n 123).

6 — Reflections on Epistemic Implications of Legal Change

...the possibility arises that learning about evolution itself will become a property of the legal code.

—Simon Deakin¹

...liberation has to come from a commitment to justice (das Ritchtige). The responsibility for this commitment cannot be sought in historical processes reconstructed through developmental logic. It lies only in ourselves.

—Michael Schmid²

This concluding chapter offers some rumination on the various issues raised by the dissertation. Before addressing some of the questions that the preceding investigations have raised, I want to provide a window into a case study that bears on the dissertation's themes, and that offers an even clearer picture of how ideas can influence law, unmuddled with questions of institutional politics and international development policy.

I. Ideas have Consequences

Over the last forty years, the United States has run something of a natural experiment on whether and how much expert knowledge—the ideas, techniques and conceptual tools of expert communities beyond the boundaries of the legal community proper—can shape the development of law. The preliminary results are rather remarkable.

Between 1976 and 1999, the Economics Institute for Federal Judges offered two-week long seminars to introduce federal judges to economic principles and the economic analysis of law.³ Henry Manne, one of the champions of the law-and-economics

¹ Simon Deakin, 'Evolution for Our Time: A Theory of Legal Memetics' (2002) 55 CLP 1, 40.

² Michael Schmid, 'Habermas's Theory of Social Evolution' in John B Thompson and David Held (eds), *Habermas: Critical Debates* (Macmillan 1982) 180.

³ The Economics Institute for Judges, initially hosted by the University of Miami, ran once or twice annually between 1976 and 1999. The George Mason University's Judicial Education program now holds six-ten

movement, developed and designed the programs as part of his leadership of the Law and Economics Centre hosted, initially, at Miami, then at Emory, and finally at Georgetown universities.⁴ In some respects at least the success of the program was impressive. In 1990, nearly forty percent of sitting federal judges had participated in the Institute.⁵ As of 1999, well over half of decided cases in the federal circuit courts included a judge who had attended.⁶ Given this level of exposure, Henry Butler, who helped run what he called ‘the Manne programs’ between 1989 and 1991, took it for granted that these courses had ‘influenced the thinking of a generation of federal judges.’⁷

A. Consequences of Training on Legal Outcomes

In a recent study, Ash, Chen and Naidu set out to test whether exposure actually translated into influence, tracing some of the pathways through which the ideas presented at the Institute might have affected those judge’s decisions. Unlike the case studies in this dissertation, their methods were entirely statistical. They constructed a collection of linear models that predicted some high-level feature of each judge’s behaviour as a combined function of the judge’s personal characteristics, general trends in the circuit or district they sat on—and whether they had attended the Manne programs. Using this model, they estimated the (average) effect that attendance had had on the case outcomes of individual judges.⁸

events annually, with the Institute supplemented by a variety of courses each limited to twenty judges, including three to four-day workshops on particular legal topics (antitrust, labour markets and employment, pensions) and four-day symposia in which judges discuss the applicability of economics principles to particular cases. As of 2018, the Institute seems to have been replaced with introductory and advanced week-long short courses on economics for judges. Elliott Ash and others, ‘Ideas Have Consequences: The Impact of Law and Economics on American Justice’ (2017) Working Paper <<https://ssrn.com/abstractid=2992782>>, accessed October 18 2018. For an overview of the history and design of the program, see Henry N Butler, ‘The Manne Programs in Economics for Federal Judges’ (1999) 50 Case W Res L Rev 351. For recent developments, see online <masonlec.org/divisions/mason-judicial-education-program/>.

⁴ Manne coined the idea of a ‘market for corporate control,’ and was an early, ardent critic of insider trading, based on the argument market actors were best-placed to judge whether insider trading should be allowed. Henry G Manne, ‘Mergers and the Market for Corporate Control’ (1965) 73 *Journal of Political Economy* 110; Henry G Manne, *Insider Trading and the Stock Market* (Free Press 1966). Nonetheless, it is likely that his renown and reputation is founded not on his singular (albeit important) contribution to the law and economics literature, but precisely on the kind of leadership and advocacy of law and economics typified by the Manne programs. On Manne’s contributions to the Institute, see Butler (n 3) 351, 354–56.

⁵ Butler (n 3) 352.

⁶ Ash and others (n 3) 13–15. Given that attendance rates in the flagship Institute declined after 1990, and given the diversification of the training programs for judges now offered (see above, n 3), tracking the LEC’s influence in the future will prove a much harder task. On declining attendance, see Butler (n 3) 360–61.

⁷ Butler (n 3) 352.

⁸ The basic structure of their models is laid out in Ash and others (n 3) 21–22.

The findings of their study are striking. Ash, Chen and Naidu looked first at outcomes in cases where a government regulatory agency was a party to the litigation.⁹ Drawing on the outcomes of 20 000 cases, and under the presumption that any holding against the government party would count as anti-regulatory, they find that attendance at the Institute increased the chance of a judge ruling against environmental and labour regulations by approximately 5%.¹⁰ A second set of results drew on a previously-constructed sample of Circuit court decisions which had been hand-coded as ‘conservative/liberal/hard-to-say.’ Previous analyses of that sample has shown that the aggregate political trend of decisions moved from slightly liberal to rather conservative between the 1970s and 2000.¹¹ Ash, Chen and Naidu’s analysis of a large subset (approximately 30%) of that sample, those characterized as labour or ‘regulation’ cases, ‘indicates the Manne program accounts for 28-42% of the rise in judicial conservatism’ during that period.¹² Third, for a subset of criminal cases that resulted in the imposition of a prison sentence of determinate length, they focused on the length of the sentences imposed by judges.¹³ They found that, following attendance at the Manne program, judges increased the length of the sentences they handed down by 7%, and that they were 2% more likely to impose any sentence.¹⁴ More strikingly, when the analysis was limited to decisions made after federal sentencing guidelines were loosened in 2004, they found that the sentencing behaviour of judges who had attended the Manne program were 13% longer than those imposed by judges who had not—working out, approximately, to an increase of more than six months.¹⁵

Are their findings credible? Given the extent of the critiques levelled against linear regressions in Chapter 4, it is worth giving a word to the strengths and weaknesses of the approach. It should be noted, first and foremost, that the structure of their research design corresponds well with the effect they are actually trying to measure. They are interested in the average (presumptively-constant) effect of Manne attendance on the

⁹ The category excludes criminal trials.

¹⁰ Ash and others (n 3) 22–23.

¹¹ The measure moved from approximately –0.1 to approximately +0.4 on a scale with ‘all liberal’ at -1 and ‘all conservative’ at +1. See *ibid* 18–19.

¹² *ibid* 18, 23–25.

¹³ *ibid* 19–20.

¹⁴ *ibid* 26–27.

¹⁵ To give a sense of the scale of this effect compared to the effect of other case characteristics on outcomes, Ash, Chen and Naidu point out that similar analyses found a 10% discrepancy between the sentences imposed on white and black defendants, respectively. *ibid* 26–30.

behaviour of individual judges, and their analysis is generated by comparing the behaviour of individual judges across time, not comparing judges who had attended to those who had not.¹⁶ One alternative explanation for the observed effects could be that attendance in the program and bias in decision-making both reflect the preexisting predilections of individual judges and general trends in the court's jurisprudence. Yet their results showed a significant effect of Manne attendance, even in models that controlled for average trends (court fixed effects) and for a variety individual characteristics (judge fixed effects) found to be correlated with the outcome variable.¹⁷ Despite these precautions, constant factors like judicial career history cannot be used to control for changes over time, and one final possibility was that judges who attended Manne also happened to be those who were already becoming more conservative over time. Ash Chen and Naidu took this possibility into account, too, by using 'event studies' to check for a jump in the relevant outcome variables after Manne attendance. For all of their published results, they found just such a jump.¹⁸

How might these results be interpreted? Paradoxically, they actually reveal nothing about how attendance at the Manne program may have influenced any individual judge, or about the factors that may have conditioned 'susceptibility' to its content. Because they focus on capturing an average effect across judges, their models are incapable of distinguishing between those whom attendance may have affected very little, those who it made more conservative / less sympathetic to regulation, and those for whom it may have had the opposite effect. And, much like the linear models critiqued in Chapter 4, their design did not provide any way to capture how individual characteristics may have interacted with the 'treatment.' Yet inasmuch as we are interested in the aggregate effect on judicial outcomes, the data seems incontrovertible. The Manne Institute changed the outcome of cases heard by judges who had attended.

B. Consequences of Ideas for Law?

In a sense, evidence of a link between judicial training and patterns in the holdings of individual cases leave open some of the hardest questions—though, as will be seen, Ash,

¹⁶ See above, n 8.

¹⁷ Ash and others (n 3) 12–15, 21–30. Another confounding factor—judicial choice of cases—was avoided by a court policy of randomly assigning cases to judges that appears to have been observed in practice. *ibid* 15–16, 50–51.

¹⁸ Ash and others (n 3) 21, 22, 24, 27.

Chen and Naidu did not stop once they had established a link. The correlations, on their own, suggest the presence of a *what* but leave open important questions about the *whys*: the relationship between law and the domain of knowledge, ideas and expertise.

Let me say more. There is, first of all, the possibility that the channel of influence runs neither through ideas, nor even through law, properly speaking. In its early years, the Manne program involved a two-week, all-expenses paid trip to Miami.¹⁹ Early critiques of the program raised concerns that judges might be induced by their attendance at an all-expenses paid trip to Miami, funded for by a 'who's who' of corporate America, to favour those corporations should they appear before them at litigation.²⁰ Without denying that warm feelings for benefactors might influence judicial behaviour, the premise that the change in judicial behaviour was straightforward interest-based bias is belied by the effect of Manne attendance on criminal law outcomes. Moreover, funding for the programs came solely from private foundations (and not from corporations) from 1980 onward.²¹

What made these results truly relevant for thinking about is that their findings are not limited to outcome, but also ties outcomes to the presence of economic keywords.²² In addition to rating decisions by the relative frequency of these keywords, they used a more complex algorithm that ranked decisions on the basis of a clustering method that sought to measure semantic 'distance' from these keywords.²³ While the frequency of the keywords has seen at best a slow upward trend, federal cases have moved noticeably closer to those key words, semantically speaking, since the 1940s.²⁴

¹⁹ 'Manne was a zealous proponent of over-consumption of fine food.' Butler (n 3) 358. After the LEC left Miami, the seminars were still held in lavish locations. Nan Aron and others, 'Judicial Seminars: Economics, Academia, and Corporate Money in America' (1994) 25 *Antitrust L & Econ Rev* 33, 37–38.

²⁰ Ash and others (n 3) 9; Aron and others (n 19) 33–34, 38–39.

²¹ The LEC itself was still largely supported by corporate funders. Aron and others (n 19) 36, *ibid* 40. Butler takes it for granted that the shift from direct corporate sponsorship to private foundation sponsorship removes the hint of bias from the programs. Butler (n 3) 365–66. Aron Moulton and Owens point out that the ideology of foundations, many of them funded in part by corporate donation, should not be considered free from ideological bias.

²² The keywords (key phrases) they use to measure proximity were externalit*, transaction_costs, efficien*, deterr*, cost_benefit, capital, game_theo, chicago_school, marketplace, law1economic, law2economic.

²³ Ash and others (n 3) 16–17. The details of the algorithm are complicated, but in rough terms, the algorithm is trained not just to find the relevant keywords, but to recognize words and phrases that appear in similar semantic contexts to those keywords and to grade texts (whole decisions) for how much they look 'like' those contexts. For details, Quoc Le and Tomas Mikolov, 'Distributed Representations of Sentences and Documents' (2014) 32 *Proceedings of Machine Learning Research* 1188.

²⁴ Ash and others (n 3) 17–18.

II. Beyond Critique

To a significant degree, this dissertation was inspired by a ‘cute’ observation. Shleifer’s Law & Finance studies, critiqued in Chapter 5, offer a functionalist, instrumentalist account of law and its effects, of the kind that is often used to ground arguments for legal reform. Yet unlike much of the research in the economic analysis of the law that stretches back to the early days of Chicago school law and economics in the 1970s, and even earlier to the American legal realists, Shleifer’s arguments are implicitly grounded in a theory of (socio-) legal change. Because his arguments about the probable effects of legal change are empirical rather than analytical, their validity depends on a broader model of the dynamics of change among legal forms, institutional practice and economic outcomes. The theory underlying the claimed causal links, very thin in its initial incarnations, was eventually spun out across a series of articles into a more complex, explicit vision of legal systems, political action, legal reform and economic variables. The development of the theory unfortunately worked, not to validate the original claims, but to demonstrate how tautological, circular—or contradictory—its theoretical underpinnings were. The earlier papers had used legal tradition to ground claims about law’s universal effect on economic variables; what the flushed-out theory showed, by contrast, was that the effects of legal reforms depended significantly on local context, including local political context.²⁵ Whether you focused on the anaemic version laid out in the earlier case studies, or on the richer version developed over the subsequent decade, the theory attached to Law & Finance portrayed a world in which there were essentially three causal factors acting on legal rules: macroeconomic development as measured by various quantities, the flux and play of political interests, and the legal system itself, understood as a repository of a longstanding legal tradition.

The irony of that theory was that, if one looked to what Law & Finance did in the world rather than what it said about the world, it offered a case in which paradigms, models, claims, or tools—in a word, ideas like Law & Finance—seemed to represent a fourth causal factor.

This kind of internal irony, or performative contradiction, has long been the fascination of ‘postmodern’ theories concerned with self-reference, reflexivity and paradox. Yet I was

²⁵ The relationship between the theoretical underpinnings of Law & Finance and Legal Origins Theory proper is explored in Liam McHugh-Russell, ‘Causal Inference and the World Bank’s *Doing Business* project,’ under review with the Canadian Journal of Development Studies

not content to rest easy with the conclusion that Law & Finance ‘proves itself wrong.’ There is certainly a tradition, in social theory and in legal scholarship, which revels in the ability to catch other scholarship ‘with its pants down.’ But, for one, proving a theory wrong does not actually tell us that much about the world. As statistician Andrew Gelman has long emphasized, ‘all models are wrong.’ What should concern us is how much they are wrong, and whether it is possible to build models that are less wrong.²⁶ Especially among legal scholars, it is impossible to shake awareness of the practical consequences of the models and concepts used by various actors—judges and legislators, certainly, but general counsels and administrative agents, too. One of the central arguments made against critical legal studies in the late 1970s and early 1980s was that their scholarship had no obvious or direct practical consequences.²⁷ One key defence, offered by Richard Fischl, was that it would be a dereliction of duty for legal scholars to ignore what law actually does or how law actually works in the name of producing work that had direct or obvious ‘practical consequence.’²⁸ Implicit in Fischl’s defence was the premise that the trade-off between practical consequence and being wrong would only be partial or short-term—that ultimately, pursuing a ‘less wrong’ image of law (its operation, its rules, its effects) would inform action within, or at least with regard to, the legal system. There has admittedly been a great deal of work in the critical legal studies tradition aimed at no more than trashing the paradigm of others.²⁹ But I for one am interested in more than the internal coherence of a theory or body of scholarship; I want to do more than identify gaps between a given account and reality. Exploring how a theory ‘proves itself untrue,’ however knotty it may seem as a matter of formal logic, whatever the intellectual frisson that such knottiness may generate, and no matter how *interesting* it may be,³⁰ does not in the end provide an escape from the negative mode. I admit that it is no more than a

²⁶ Andrew Gelman, ‘Some Thoughts on the Saying, “All Models Are Wrong, but Some Are Useful”’ (*Statistical Modeling, Causal Inference, and Social Science*, 12–June 2008) <https://andrewgelman.com/2008/06/12/all_models_are/> accessed 13 December 2018. The formulation, ‘All models are wrong but some are useful’ is attributable to George Box. Robert L Launer and Graham N Wilkinson (eds), ‘Robustness in the Strategy of Scientific Model Building’ in *Robustness in Statistics* (Academic Press 1979) 203–04; George EP Box, ‘Science and Statistics’ (1976) 71 *Journal of the American Statistical Association* 791.

²⁷ Richard Michael Fischl, ‘The Question That Killed Critical Legal Studies’ (1992) 17 *Law & Social Inquiry* 779.

²⁸ *ibid* 783.

²⁹ Mark G Kelman, ‘Trashing’ (1984) 36 *Stan L Rev* 293.

³⁰ Murray S Davis, ‘That’s Interesting!: Towards a Phenomenology of Sociology and a Sociology of Phenomenology’ (1971) 1 *Philosophy of the Social Sciences* 309.

personal wont, but I aim to do work that say something affirmative about the world outside the theory. I want to reach outside the text.

III.How Might Knowledge Matter for Law and Legal Change?

My goal has been to contribute to, or at least to gesture toward, an approach that builds understanding of law and its relation to the world. If my approach is critical, it is not entirely negative. In its ambitions, the project is at least partially positive, or affirmative.

I thus pursued the project constructively rather than deconstructively. That involved, most fundamentally, a strategy of building atop well-developed theory, rather than trying to reach from weak theory toward better. Chapter 5 went some way toward showcasing the extents and number of dimensions along which the theoretical weaknesses and failures of Law & Finance run. There was little promise in trying to graft an account of epistemological salience onto that body of thought.

The research design of this project was an exercise in suspending preconceptions. The *Doing Business* project, as I hope I have demonstrated, offers a fertile starting point for reflection on positivist theories of legal change. I could have started elsewhere, with an examination of the episode as a case study in the relation between law and various forms of knowledge. I could have started by linking up my analysis with the rich body of work that has studied how law uses and draws from other forms of expertise,³¹ with a broader literature that engages with action in the legal field as a knowledge practice (law as knowledge),³² or above all with research, rooted in actor network theory, which seeks to uncover how events and objects emerge out of the interaction between a catalogue of the ‘actors’—including human choosers and other familiar economic agents, but also materials, texts, words and concepts—with which they are entangled.³³ Actor network theory grew out a tradition of science and technology studies identified with Bruno Latour, and thus has origins that frame knowledge as an emergent outcome of

³¹ Elizabeth Mertz (ed), *The Role of Social Science in Law* (Ashgate 2008); Mariana Valverde, *Law's Dream of a Common Knowledge* (Princeton University Press 2003).

³² Annelise Riles, ‘Legal Knowledge’ in David S Clark (ed), *Encyclopedia of Law and Society: American and Global Perspectives* (Sage 2007); Sally Falk Moore, ‘Treating Law as Knowledge: Telling Colonial Officers What to Say to Africans about Running “Their Own” Native Courts’ (1992) 26 *Law & Society Review* 11.

³³ For a recent survey, see Emilie Cloatre, ‘Law and ANT (and Its Kin): Possibilities, Challenges, and Ways Forward’ (2018) 45 *Journal of Law and Society* 646.

interactions. Some but not all ANT-inspired work on law specifically addresses law-making as a form of knowledge production or *veridiction*.³⁴

My goal however was not to develop theory on the epistemic lives of law and society, or even on the epistemic dimensions of law-making. Whatever my baseline scepticism about the theoretical foundations of evolutionary accounts of law, they are staged under the commendable goal of providing policy makers with credible information about opportunities and constraints on the use of law to achieve instrumental ends. My intent was not to prove that aim impossible, but to attempt to vindicate it in the face of some perturbing questions about the apparent relevance of knowledge, including research, in the processes that such research intends to describe. I was not sure that it was possible to get to the kind of positive (general, naturalistic, etc) explanation aimed at by the Law & Finance studies and evolutionary approaches more generally, if I started with findings primarily addressed to law's relation to knowledge. Standpoints are not always mutually reconcilable. Accounts, even scientific accounts, operate at different levels and for different purposes. You do not need to think about chemistry to understand the evolution of species. It is enough to know what DNA does at a genetic level.

My strategy was to reconstruct a positive, largely economic account from the ground up, confronting the accounts with questions about the relationship between (socio-legal) epistemology and (socio-legal) ontology. I was sharply cognizant that, if I treated these approaches fairly, my analyses might show the answers to my questions to be irrelevant to the project those approaches were trying to pursue.

I do two things in what follows. First, I will draw on the example of the United States federal courts, along with those illuminated in chapters 4 and 5, to provide a preliminary catalogue of some of the channels or dynamics in which knowledge of various forms might come to matter.

A. The Role of the Reasoning Mind

The first point I want to make is about imagination, or creativity.

Parties to a litigation have competing interests. They have competing claims. They have to compose those claims in the discourse of law. The form of the claim is arguably

³⁴ Bruno Latour, *The Making of Law: An Ethnography of the Conseil D'État* (Marina Brilman and Alain Pottage trs, Polity Press 2010).

indeterminate. That is, there may be many ways of framing the ex post relationship between the parties in ways that are compelling to the judge, and these ways of framing, as much as they have to draw on a corpus of prevailing legal concepts, may involve some imagination. There are sometimes, in the crafting of the brief and the presentation of the argument, moments for creativity that exceed the piecing together of already-legal materials. There is (in systems theoretical terms) structural coupling between the legal system and the individual psychic system; and, if an argument is to be adopted by a judge, a borrowing from a shared culture as well.

Of course, as with the example of the Beveridge report discussed in Chapter 4, such use of imagination and creativity may be more common in the legislative milieu. Hayek's hostility toward legislation was ostensibly rooted not in its structure or in its participants, but precisely because he understood legislation to be the domain of the design, planning and active reason that he believed to be such a threat to the spontaneous order of the market and its law. And as much as legislation may be mediated by political compromise, constrained by the need to integrate into the existing legal order, and mitigated in actual effects by the action of the courts and future regulatory action, he was right about legislation's content, if not its consequences. The legislative process often does involve constructing a picture of how things will work—a regulatory logic, a field of action, the form of a relationship. It may also involve the construction of novel legal concepts.³⁵

Where Hayek may have gone wrong is in ignoring the role of such planning in judge-made law as well. Much of the political stakes of individual legal decisions may be hidden, but even its explicit discourse, legal decisions are filled with visions of (proper) order, and with ideas of how things 'shall' work.

Judges, in their decisions, might draw these visions or notions from arguments presented by parties and their lawyers. But they may also get them from their experiences prior to becoming judges including, while they were themselves lawyers (in common law settings), and while they were law students.

B. Law's Constitutive Function and the Salience of the Vernacular

Let me foreground the relationship between legal discourse and the vernacular.

³⁵ One recent example of such novelty was litigation in Ontario (Canada), under novel consumer finance regulations, that required the court to develop a working conception of a 'payday loan.' *The Director v The Cash Store* No. CV-13-482242 (Canada Ontario Superior Court of Justice 12 February 2014).

The easiest way to get my point about the relationship between law and the vernacular might be to go the long way around, through a critical engagement with law's constitutive role; or at least, it is the easiest way I know to get there.³⁶

One of the contributions of the first generation of critical legal scholars was the attention they drew to a previously overlooked aspect of law's relationship with social relations.³⁷ Law not only regulates in the public benefit, as emphasized by the twentieth-century liberal-meliorist mainstream; it not only facilitates social relations, as Fuller once put it; nor does it simply distribute power, as the first generation of American legal realists emphasized.³⁸ It does all these, and is also part of the stratum through which those relations are materialized, understood, and circulated. As history lurches forward, law is one place where the rubber meets the road.

In the rush to seize a moment of relevance for law, however, legal scholarship has occasionally overreached, inverting earlier fallacies and advancing a reading of law's constitutive function that overestimates the work law does. The error involves an illogical jump, from the observation that many salient categories of social life are also legal concepts, to a conclusion that those categories are 'fundamentally' legal.

Such overreach is unfortunately common in scholarship that seeks to critically examine the substantive relationship between legal discourse and the world. Take Gordon's classic *Critical Legal Histories*, addressed in Chapters 3 and 4. Against an array of scholarly traditions that treat law as ancillary to a real world made up of basic elements that exist independently of law, Gordon argued that:

... in practice, it is just about impossible to describe any set of 'basic' social practices without describing the legal relations among the people involved—legal relations that don't simply condition how the people relate to each other but to an important extent define the constitutive terms of the relationship, relations such as lord and peasant, master and slave, employer and employee, ratepayer and utility, and taxpayer and

³⁶ Parts of this section are adapted from Liam McHugh-Russell, 'Getting the Constitutive Power of Law Wrong' (*Legal Form*, 31 March 2018) <<https://legalform.blog/2018/03/31/getting-the-constitutive-power-of-law-wrong-liam-mchugh-russell/>> accessed 28 November 2018.

³⁷ Karl Klare, 'Law-Making as Praxis' [1979] *Telos* 123; EP Thompson, *Whigs and Hunters: The Origin of the Black Act* (Penguin Books 1990); Morton J Horwitz, *The Transformation of American Law, 1870-1960: The Crisis of Legal Orthodoxy* (Oxford University Press 1992).

³⁸ Oliver Wendell Holmes, 'The Path of the Law [1897]' (1997) 110 *Harv L Rev* 991; Lon L Fuller, 'Law as an Instrument of Social Control and Law as a Facilitation of Human Interaction' [1975] *BYU L Rev* 89; Morris Cohen, 'Property and Sovereignty' (1927) 13 *Cornell L Rev* 8; Robert L Hale, 'Coercion and Distribution in a Supposedly Non-Coercive State' (1923) 38 *Political Science Quarterly* 470.

municipality. For instance, among the first words one might use to identify the various people in an office would likely be words connoting legal status: 'That's the owner over there.' 'She's a partner; he's a senior associate; that means an associate with tenure.' 'That's a contractor who's come in to do repairs.' 'That's a temp they sent over from Manpower.' This seems an obvious point, but if it's correct how can one square it with the standard view of law as peripheral to 'real' social relations? Could one, for example, seriously assert that 'the law of slavery has tended to play only a marginal role in the administration of slave societies?' Slavery is a legal relationship: It is precisely the slave's bundle of jural rights (or rather lack of them) and duties vis-à-vis others (he can't leave, he can't inherit, he has restricted rights of ownership, he can't insist on his family being together as a unit, etc.) that makes him a slave. Change the bundle significantly and you have to call him something else. And how could one say something like 'medieval law bolstered (or undermined) the structure of feudal society'? Again, a particular (though concededly in this case very hazily defined) set of legal relations composes what we tend to call feudal society. If those relations change (commutation of in-kind service to money rents, ousting of seignorial jurisdiction to punish offenses, etc.) we speak not simply of changes in 'the legal rules regulating feudal institutions,' but of the decline of feudalism itself.³⁹

Law had a role in establishing the boundaries and limits of the may, musts and mustn'ts of relationships between slaves and other social classes; in continually reproducing 'slave' as a socially understandable and politically legitimate category; in policing the cognitive content of slave and non-slave, and thus in maintaining the distinction between them; through all these effects, in perpetuating a slave society. But it is a step too far to say that 'slavery is a legal relationship' as if it were *only* a legal relationship. Though law may have made slavery possible as an institution, necessary causes are not sufficient conditions. They are certainly not essences. Gordon wanted us to be careful about hypostasizing a strict separation of law and society; in practice, he offered a vision of society in which law occupies the entire field.

He was probably not the first, and he has certainly not been the last. Consider an articulation of an argument concerning law's constitutive role in recent contribution by a collection of scholars, including Simon Deakin, who have been at the forefront of debate on socio-legal evolution:

³⁹ Robert W Gordon, 'Critical Legal Histories' (1984) 36 Stan L Rev 57, 103-04.

In the first sentence of the opening chapter of the Communist Manifesto of 1848, Marx and Engels declared: ‘The history of all hitherto existing society is the history of class struggles.’ But after forty years had elapsed, Engels felt obliged to define the two main classes of modern capitalism, the bourgeoisie and the proletariat. To the 1888 English edition he added a note:

By bourgeoisie is meant the class of modern capitalists, owners of the means of social production and employers of wage labour. By proletariat, the class of modern wage labourers who, having no means of production of their own, are reduced to selling their labour power in order to live.

When it came to defining these crucial classes, Engels was obliged to refer to concepts such as ownership, employment of waged laborers, and the selling of labor power. None of these terms can be defined adequately without reference to law and legal ideas. Ownership—in the fullest sense—implies legal rights, enforced by recognized contract and the legal powers of the state. The employment contract is a specific legal form, differing from a contract for sales or services. Selling implies the legal transfer of property rights, on a temporary or permanent basis. The selling of labor power involves the legal transfer of limited rights of authority over the laborer and the use of her capacities toward contracted purposes. Law appears in the definitions of social classes which are regarded as fundamental. So, law too must be at the foundation.⁴⁰

It is surely correct that the legal life of ownership—or of contract, employment, marriage or really any of the myriad concepts that exist both in law and in the vernacular—contributes to and helps to shape the materialized reality of that concept as a socially-experienced category. Here, Deakin and his collaborators say ownership *implies* legal rights; that selling *implies* a legal transfer; that selling of labour power *involves* the legal transfer of authority.

But there is a far wider gap than they seem to allow between the claim that these concepts are implicated and entangled with law, and the claim that law is ‘at their foundation.’ Legal scholars too often say ‘these words have a legal definition’ and take that as proof positive that their meaning and significance *is* legal; that is, legal all the way down.⁴¹ We cannot understand how ‘capital’ or ‘profit’ work as part of the apparatus that orders our

⁴⁰ Simon Deakin and others, ‘Legal Institutionalism: Capitalism and the Constitutive Role of Law’ (2017) 45 *Journal of Comparative Economics* 188, 191.

⁴¹ Part of the confusion may arise from a folk epistemology that supposes the significance of a concept can be captured by a *definition*.

economic life without attending to how they are used in legal texts, and by legal institutions and legal actors. Granted. But it is a grave error to think that the existence of legal usages nullifies the existence of other meanings; even more grave to think a legal definition might exhaust the social significance of those concepts.

Father, profit, employee, corporation, capital, wife: there are important questions about the role of law (qua institutionalized, rationalized form of state power) in giving such categories and concepts social substance. There are important and even more difficult questions about the relationship that obtains among the 'meaning' of these categories in the discourse of the legal system, the understandings people rely on in everyday usage, and how practices organized around those concepts actually function. But these issues cannot be investigated—the question cannot even be asked—if we cling to the narcissism that the use of concepts by lawyers and judges is rubber, road and the turn of the wheel, entire.

The employee who undertakes a harmful, wasteful, or humiliating task because her boss tells her to may only feel coerced because she lives in a society where the apparatus of the state vindicates the right of bosses to give orders. But the boss's instruction, his expectation that it will be obeyed, her sense that she should obey, her fear if she refuses, the consequences if she does—these are incidents of a subordinate relationship that exists as more than law, and through more than legal means. Like other categories claimed as legal, what an employee *is* 'in the fullest sense' lives in the variety of understandings that the relevant individuals have of that concept, in the practices informed by those understandings, and in what emerges from interactions and conflicts between those practices. Those understandings and practices may be informed by law (as well as by other rationalized, institutionalized intellectual practices) but they are also produced and reproduced by popular culture, familiar anecdote, everyday interaction, and public debate.

But here I need to turn the point around. What I am trying to make visible is not the limited power of law's constitutive functions to make (assemble) social reality, even when it comes to categories which lawyers are wont to cast as 'fundamentally' legal. I am trying to recapture a place for the autonomy of the social beyond law. These categories have a form of existence that transcends the network of meanings, expectations, and enforceable norms that they are granted through law. And, more emphatically for my

purposes, their actuality is experienced in ways that go beyond their representation through the conceptual frame of the legal system. They are also represented through the vernacular experience already mentioned above popular culture, familiar anecdote, everyday interaction and public debate.

Once we come to understand that there is a space between the legal conceptualization of key categories and the vernacular representation of those categories; once we become willing to admit, precisely through an understanding of the complexity of ‘social constructivism’ that the relative correctness of these representations is of less pith than their shared participation in the shared materialization and experience of those categories, then we might become interested, as well, in how those representations shape each other. And, to make the point very explicit, it may mean that vernacular understandings inform legal meanings.

There is a reason lawyers use the concept of the ‘corporation’ rather than a concept named, e.g. by a numerical index. The link between vernacular experience and legal discourse is key to the function of law. By linking to everyday categories, we increase analytical complexity, but we increase legal predictability. Law’s use of concepts with everyday relevance means that people can grasp a sense of where they stand, in terms of enforceable norms, making use of a familiar shorthand. It would be a surprising result indeed, however, if lawyers and judges could seal themselves within a closed system of legal communications.

IV. What is Evolutionary Jurisprudence For?

A. The Uses of Research

The conceit lying beneath a great preponderance of social science research, and which inflects much of the scholarship on law inspired or informed by the appeal to scientific—and implicitly, social scientific—validity, is that its goal should be a form of *explicit* (overt, formal) knowledge. The ideal here is a kind of knowledge that can be taught through the banking model of education: tellable, transferable, and discrete.⁴² Though it may fall into the quantitative register that has come to dominate the social sciences, rooted in a fetish

⁴² Credit for the ‘banking model of education’ is due to the Brazilian theorist Paulo Freire, *Pedagogy of the Oppressed* (Myra Bergman Ramos tr, Penguin Books: Sheed & Ward 1970).

for (causal) *explanations* whose characteristic aim is to provide an account of one set of things in terms of another,⁴³ or pursue a task of *description* that amounts to an open-minded inquiry into the diversity and complexity of relations between elements in a field,⁴⁴ *the account itself* is taken to be the end of the inquiry. Constructed correctly, the account can don the cloak of truth. Properly done, inquiry expands the borders of knowledge, with the individual scholar, like a soldier in a conquering army, contributing to the territory possessed by the commonwealth. Science—or, for those who may feel excluded from the ambit of that term, scholarship—increases what we know by adding to the sum of knowledge we already possess. Republican voters are shorter than Democrats. Liberal democracies do not go to war with each other. A labour rights regime that excludes a particular group of workers from a method to effectively collectively bargain with their employer is contrary to the rights protected by the Canadian *Charter of Rights and Freedoms*.⁴⁵ Like the distance from Mars to the sun, the freezing point of ammonia, or how a bee flies, the ambition of such research is imagined to be the continual accumulation of true claims, like individual grains on a mountain of sand.⁴⁶

I am not going to pursue the claim here that social science research belies this ambition per se. There are no doubt a large number of scholars motivated by no more than a desire to unlock puzzles implied by social behaviours which contradict their intuition, or by a genuine, wholly innocent curiosity about parts of the human experience with which they are unfamiliar.⁴⁷ There is a great deal of work, moreover, especially at the boundaries of the humanities, informed primarily by intrinsic and in some sense expressive ends, whether they be aesthetic or some variety of ethical/political. Some historians just want to tell a good yarn. Many ethnographers have been motivated by a desire to give voice,

⁴³ For the nature of the 'quantitative register' in the social sciences, appreciation of its dominance, and critiques of its shortcomings see Gary King and others, *Designing Social Inquiry: Scientific Inference in Qualitative Research* (Princeton University Press 1994); Henry E Brady and David Collier (eds), *Rethinking Social Inquiry: Diverse Tools, Shared Standards* (2nd edn, Rowman & Littlefield Publishers 2010).

⁴⁴ On description as a necessary mode of social inquiry, see Anne Orford, 'In Praise of Description' (2012) 25 *Leiden Journal of International Law* 609; Clifford Geertz, 'Thick Description: Toward an Interpretive Theory of Culture' in *The Interpretation of Cultures: Selected Essays* (Basic Books 1973).

⁴⁵ *Ontario (Attorney General) v Fraser*, [2011] 2 SCR 3, 2011 SCC 20 (Canada).

⁴⁶ The reference to sand may be unnecessarily harsh. I used to study pure mathematics, a field I view as engaged is something akin to the building a permanently-expanding castle in the sky, a crystalline structure constructed of pure reason, whose nooks and crannies remain in permanent equilibrium. I do not mean to suggest by my metaphor that all human knowledge is equally fragile, equally contingent, or discrete.

⁴⁷ Davis suggested that an important factor in the success of social theory was that it promoted a premise which contradicted the intuitions of the public. Davis (n 30).

place, weight, or depth to forms of life beyond or peripheral to their own societies. I do nonetheless want to suggest that a large portion, perhaps the majority, of scholars who write in a 'social scientific' register (broadly understood) are hiding, or distracting from, or misconstruing the actual instrumental ends and motives that underlie their research output. Whether consciously or unconsciously, they are not saying what they are actually up to.

In a lucid, well-researched book on the methodology of the social sciences, John Gerring compiles a bried list of the criteria that scholars might use in the choosing the concepts and conceptualizations at the foundation of their research.⁴⁸ And slipped in among a list of uncontroversial factors—some based on the desire to be understandable both among a research community and to ordinary users of a language, others constitutive of objectivity, accuracy and validity of the research outputs—is another factor that does not fit into either of these categories: relevance.

The question of relevance, however, leads us away from the paradigm of explicit knowledge. For this reference to relevance raises a pointed question: relevant to whom? If we imagine the archetype of the university knowledge system, with departments of political science and of philosophy, we will discern a mode of inquiry that searches for final answers to universal, strictly distinguishable questions: 'what is?' on the one hand and on the other, 'what should be?'

It may be in the business schools, and ironically so given their hegemony, that we find perhaps the least concern with the conceit of universal knowledge about humanity's nature, disposition, destiny, or vocation. Scholars in business schools are aware that the knowledge being produced is meant to be useful, and useful to particular groups of people engaged in particular tasks. A great deal of marketing research is concerned with the pathologies, limitations and peculiarities of human decision-making under modern capitalism, but its publication in the marketing journals belies any suggestion that the purpose is some kind of pure knowledge. Marketing journals make overt what is elsewhere left unstated, which is the practical function that drives the nature, focus, and content of work in the human sciences

⁴⁸ John Gerring, *Social Science Methodology: A Criterial Framework* (Cambridge University Press 2001).

B. Being Implicated

Here, I want to suggest another path, inspired by the work of Raymond Geuss.⁴⁹ In his concise critique of contemporary political philosophy, Geuss makes two key moves. The first is to situate the problem of politics, not just in a single collective choice about institutional form, but in the judgements that individuals and groups have to make about what sorts of action to take and reasons to give, in particular historical contexts, and under the constraints of uncertainty, limited resources, and the passage of time. The second is that political thought, in such a context, is not limited to furnishing a unified vision of just social institutions, or even to articulating a repertoire of institutional choices. He argues, instead, that political theory can be useful in at least five ways. The first is what he calls understanding forms of collective action, a task which includes but is not exhausted by the tasks of explanation and description;⁵⁰ The second is evaluation of such forms collective actions, in terms of justice and legitimacy, certainly, but also in terms of efficiency, comprehensibility, beauty—this is implicitly comparative; The third is guidance or orientation—giving people an understanding of their place in the world, and ways of framing, justifying, reasoning about their own actions; The fourth is conceptual innovation—Geuss’s example is Hobbes’s conceptualization of the state. Another would be Hayek’s vision of the market; The fifth is the critique of ideology. This typology can easily be understood to apply to political science more broadly and to political economy in particular

Geuss’s approach disturbs the clear distinction between the task of the legislator—economic policy—and the project of trying to seize (or at least influence the exercise of) the powers of the legislator (political science). Thought or knowledge is intended to not only serve an enlightened ruler, or to inform those trying to win competitions to control levers of the state, but to orient and inform those participating in various forms of micro-politics and in conflicts determined outside of the most obvious sites of law-making; political thought in this sense has a fuzzy border with ‘strategy.’ Understanding and orientation in this sense works to inform unions and social movements, activists and citizens, and experts of all stripes trying to practice a situated political ethics. The ideal of positivist political science is faulty not only because research is ‘always informed by

⁴⁹ Raymond Geuss, *Philosophy and Real Politics* (Princeton University Press 2008).

⁵⁰ cf Orford (n 44).

norms,' (because the fact/value dichotomy cannot be sustained) but because argument, evidence, and thought inevitably appeal to certain priorities, rate the relative salience of categories, invites audiences to attend to some sites rather than others, implies what vectors of approach might be fruitful; treats some parts of the social world as stable, and others as precarious.

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