Winter Vol. 72 No. 4 (2021)

NORTHERN IRELAND

LEGAL QUARTERLY

NORTHERN IRELAND
LEGAL QUARTERLY

JOURNAL INFORMATION

The *Northern Ireland Legal Quarterly* is a leading peer-reviewed journal that provides an international forum for articles, commentaries and notes in all areas of legal scholarship and across a range of methodologies including doctrinal, theoretical and socio-legal. The journal regularly publishes special issues within this broad remit.

Established in 1936, the journal has a history and rich vein of legal scholarship, combining distinct publications on the law of Northern Ireland, and prominence within the School of Law at Queen's University Belfast, with leading contributions to the discussion and shaping of law across the common law world and further afield. The School of Law at Queen's University Belfast took over the publication of the journal from SLS Legal Publications (NI) Ltd in 2008, where it has since been published quarterly. The journal became an online-only publication in January 2017.

ISSN 2514-4936 (online) 0029-3105 (print)

AVAILABILITY AND ARCHIVES

The *Northern Ireland Legal Quarterly* is committed to making its contents widely available, to broaden our readership base. At least one article per issue is made available on an open access basis and may be published in advance. All articles become available on an open access basis on our website one year after publication.

All contributions to the journal become available on HeinOnline one year after publication (with issues going back to its launch in 1936) and LexisNexis three months after publication (with issues from 2019). The journal's contents appears on a growing range of indexing and abstracting services.

Since 2018 the journal's contents is promoted via social media and the Contributors' Blog.

In the summer of 2020, we expanded the reach and use of the *Northern Ireland Legal Quarterly* by adding 17 more years of content to the journal's existing archives. These now go back to 1999 (volume 50) and are widely accessed by our readership. Visit our Archive pages for further details.

SUBMISSIONS

The journal welcomes submissions of articles, commentaries, notes and book reviews on a rolling basis. Please see our 'For Authors' section for further details.

If you have any queries about the suitability of your article for the journal or if you have an idea for a special issue, please contact the Chief Editor Dr Mark Flear. For the contribution of commentaries and notes, please contact Dr David Capper. For book reviews, contact Dr Clayton Ó Néill.

SUBSCRIPTIONS

Subscriptions pay for a minimum of three months of exclusive access to the journal's latest contents (and up to one year for those who do not have access to LexisNexis).

NORTHERN IRELAND
LEGAL QUARTERLY

Winter Vol. 72 No. 4 (2021)

Special Issue:
Economics in Law: Law in Economics

Guest Editors:
Richard Craven and Olivia Hamlyn

Contents

Northern Ireland
Legal Quarterly
Winter Vol. 72 No. 4 (2021) i–vii
Article DOI: 10.53386/nilq.v72i4.994

'Economics in Law: Law in Economics': Introduction to the Special Issue

Richard Craven

University of Sheffield

Olivia Hamlyn

Birkbeck University of London

Correspondence emails: richard.craven@sheffield.ac.uk and o.hamlyn@bbk.ac.uk

This special issue presents a series of papers, each of which – in different ways – reflects upon the role of law in markets. Together, these papers throw light on the ever-evolving relationship between legal studies and the discipline of economics. The special issue is based on a conference held at the University of Leicester on 11 July 2019, titled 'Economics in Law: Law in Economics'.[1] The editors of this Special Issue, who organised the conference, are grateful to all presenters and discussants, and, in particular would like to thank Leicester Law School, the Independent Social Research Foundation, and the Association for Heterodox Economics for providing funding for the event.

The conference took place just over 10 years following the great financial crisis of 2007 and 2008. The crisis, whose eruption went largely unpredicted by mainstream economists, amplified long-standing, though often unheard or marginalised, criticism of orthodox economic approaches. In the decade since,[2] with the UK economy grappling with stagnant growth, debt and inequality, literature on the state and direction of the economics profession, and, for that matter, on the future of capitalism, has been abundant.[3] There are calls for plurality in economics. Linked to this, are calls for interdisciplinarity in the formulation of economic policy prescriptions. In this regard, and

1 The conference is entirely separate to David Feldman's *Law in Politics, Politics in Law* (Hart 2013). The similar wording is accidental.

2 For a quick overview reminder, see A Beckett, 'The age of perpetual crisis: how the 2010s disrupted everything but resolved nothing' *The Guardian* (London, 17 December 2019).

3 Recent examples include P Collier, *The Future of Capitalism: Facing the New Anxieties* (Allen Lane 2018); D Coyle, *Cogs and Monsters: What Economics Is, and What It Should Be* (Princeton University Press 2021); M Mazzucato, *Mission Economy: A Moonshot Guide to Changing Capitalism* (Penguin 2021); B Milanovic, *Capitalism, Alone: The Future of the System That Rules the World* (Belknap Press 2019); T Piketty, *Time for Socialism: Dispatches from a World on Fire, 2016–2021* (Yale University Press 2021).

in some ways paralleling a critique of legal formalism, the Nobel Prize-winning economist, Jean Tirole – relating the debate to Isaiah Berlin's division of thinkers and writers into hedgehogs, those who know one big thing, and foxes, those who know many little things[4] – has criticised how economists have all too often resembled hedgehogs:[5] they are monists, wedded to equilibrium analysis, when they need to be pluralists.

Despite perceived resistance to pluralism, over the past decade, there have been significant shifts within economics. There is movement away from 'blackboard economics', as empirical economics grows ever stronger. The increasing prominence of big data, and a 'credibility revolution' in econometrics, mean that modern economic research – both micro and macro – hinges less on abstract theories, but on the statistical analysis of real-world economic data.[6] These developments, which are bringing into question core ideas, coincide with the re-evaluation of rational choice underway through behavioural economics, which involves mainstream economics engaging with the behavioural sciences (predominantly experimental psychology) in recognising the role of biases and heuristics in human behaviour.[7] Beyond this, though, and still outside the mainstream, there exist alternative narratives. These narratives, which depart from the assumptions gathered in the concept of *homo economicus*, foreground power structures, institutions and networks, and accept non-market social and political values.[8] There is a further point to pluralism, however, which, during the conference, Celine Tan sought to bring out: namely, that true pluralism is interwoven with decolonisation[9] and argues that

4 I Berlin, *The Hedgehog and the Fox: An Essay on Tolstoy's View of History* (Weidenfeld & Nicolson 1953).

5 J Tirole, *Economics for the Common Good* (Princeton University Press 2017) 101–104. Tirole bases the discussion on the way Berlin's categorisation is used by the political scientist Philip Tetlock: P E Tetlock, *Expert Political Judgement: How Good Is It? How Can We Know?* (Princeton University Press 2005).

6 In 2021 the Nobel Memorial Prize in Economic Sciences was awarded to econometricians David Card, Joshua Angrist and Guido Imbens.

7 For an introduction, see D Kahneman, *Thinking Fast and Slow* (Penguin 2011). For a socio-legal lawyer's critique of the celebration of behavioural economics, see D Campbell, 'Cleverer than command?' (2017) 26(1) Social and Legal Studies 111-126.

8 See, recently, S Picciotto and I Miola, 'On the Sociology of law in economic relations' (2021) 31(1) Social and Legal Studies 139–161.

9 Aspects of Celine Tan's conference paper appear in C Tan, 'Beyond the "moments" of law and development: critical reflections on the contributions and estrangements of law and development scholarship in a globalized economy' (2019) 12(2) Law and Development Review 285–321.

a neglect of Global South perspectives diminishes our understanding of law and markets.[10]

With this backdrop in mind, it is worth asking what a pluralist law and economics might look like. This question arises frequently in the United States (US), and the answer typically reveals a rift. Chicago 'Law and Economics' still characterises the law–economics relationship in the US,[11] where it dominates teaching and understanding law. However, in this post-financial crisis era, a 'Law and Political Economy' project is seemingly mobilising in opposition to Law and Economics.[12] By contrast, away from the US perspective, the above question has received insufficient attention, especially in the post-financial crisis era.[13] It is this that motivates the special issue. The United Kingdom (UK) experience, for example, is quite different to that of the US. Despite efforts to foster a UK law and economics movement, US-style Law and Economics, has struggled to gain any sort of foothold across UK law schools and, as such, the relationship between the two disciplines can be seen to have developed along a different path.[14] In the UK, law and economics research appears to have arisen more sporadically, across a variety of areas, with legal academics resembling more Berlin's foxes – utilising economics as and when needed. It already appears more plural, engaging with economic theory[15] and econometric analysis[16] on its own terms, or with economic perspectives deriving from elsewhere in

10 In this respect, it is welcome to see that fascinating ethnographic research into the central money exchange bazaar in Kabul, Afghanistan, has recently been shortlisted by the Socio-Legal Studies Association for its annual best article prize: see N Choudhury, 'Order in the bazaar: the transformation of non-state law in Afghanistan's premier money exchange market' (2022) 47(1) Law and Social Inquiry 292–330.

11 See D Campbell and S Picciotto, 'Exploring the interaction between law and economics: the limits of formalism' (1998) 18(3) Legal Studies 249–278.

12 See Law & Political Economy: LPE Project.

13 Nevertheless, one example, pre-financial crisis, is M Richardson and G Hadfield, *The Second Wave of Law and Economics* (The Federation Press 1999).

14 See C G Veljanovski, 'The economic approach to law: a critical introduction' (1980) 7(2) British Journal of Law and Society 158–193; A I Ogus, 'Law and economics in the United Kingdom: past, present, and future' (1995) 22(1) Journal of Law and Society 26–34; A I Ogus and R Amass, *Research Review on Law and Economics: State of the Art and Questions for the Future* (Lord Chancellor's Department 1997). See also A I Ogus, *Costs and Cautionary Tales: Economic Insights for the Law* (Hart 2006) – awarded the Socio-Legal Studies Association's annual book prize in 2007.

15 See, for example, S Deakin and F Wilkinson, 'The law and economics of the minimum wage' (1992) 19(3) Journal of Law and Society 379–392; and D Campbell and R Lee, '"Carnage by computer": the blackboard economics of the 2001 foot and mouth epidemic' (2003) 12(4) Social and Legal Studies 425–459.

16 See, for instance, S Deakin, J Armour and A Singh's path-breaking 'Law, Finance and Development' project (2005–2009).

the social sciences and humanities.[17] In addition, evident in generalist UK law journals – even in relation to topics that lie at the intersection of legal and economic expertise, like economic regulation – is often a healthy scepticism in the way legal scholars approach the policy prescriptions of economists. The papers gathered in this special issue, which include two international contributions, reflect these attitudes and approaches and further explore what a pluralist law and economics could be, signalling a path ahead both for the UK and internationally.

The conference sought to better understand the current state of the law–economics relationship, predominantly focusing on the UK experience. We structured the format of the conference, which involved speakers presenting their work and then participating in discussions with academic economists acting as discussants, with the aim of recognising new or overlooked directions and themes for research at the meeting-point of these two subjects as well as highlighting the richness of those interactions beyond the mainstream. It is with this narrative in mind that, in re-evaluating what law and economics is, we sought then and now, with the culmination of those papers in this special issue, to capture a variety of different perspectives on law and economics.

To round off the special issue, we include a book review and two case notes which examine themes complementary to those explored in the longer pieces. First, Moniza Rizzini Ansari, reviews Pistor's much-celebrated *The Code of Capital*.[18] She points to how this monograph not only changes how we think about wealth but also calls for a rethink in how we approach poverty. Second, Guido Comparato, in his note on *Council v Chrysostomides*, sheds light on the role of informal intergovernmental decision-making regarding financial stability in the potential erosion of judicial protection for rights of a constitutional nature, at the European Union level in the wake of the Eurozone crisis. Finally, Flávia do Amaral Vieira, uses *Samarco vs Environment Council of Minas Gerais* – a case involving the licensing of mining operations following a mining catastrophe in Brazil – to illustrate how economic or commercial interests may take precedence over human rights and environmental interests in regulatory procedures.

---

17 See, for example, D Ashiagbor, P Kotiswaran and A Perry-Kessaris, *Towards an Economic Sociology of Law* (Wiley & Sons 2013); S Deakin, D Gindis, G M Hodgson, K Huang and K Pistor, 'Legal institutionalism: capitalism and the constitutive role of law' (2017) 45(1) Journal of Comparative Economics 188–200; R Dukes, 'The economic sociology of labour law' (2019) 46(3) Journal of Law and Society 396–422; A Perry-Kessaris, 'The case for a visualized economic sociology of legal development' (2014) 67(1) Current Legal Problems 169–198.

18 K Pistor, *The Code of Capital: How the Law Creates Wealth and Inequality* (Princeton University Press 2020).

We have divided the six articles into two loose groupings of three representing different themes. The first three explore alternative pathways for research on law and economics.

We start with Amanda Perry-Kessaris's paper. In this paper, she challenges the mainstream economics tendency to ignore the role of law in shaping economic life and, adopting a sociologically informed perspective, highlights law's capacity to facilitate collaboratively defined change in economic life. Taking Cyprus – where division and legal uncertainty disrupt and undermine island-wide economic life – as an example, she explores how a designerly approach – and in particular prefigurative design – could tackle the complexities of econolegal change and enable articulation of a shared vision for the relationship between law and island-wide economic life. Such approaches, she shows, provide space for participatory exploration and making and communicating a sense of alternative econolegal futures. Crucially, they allow participants to behave 'as if' such futures already exist, potentially increasing the likelihood that a broadly desired alternative future might emerge. Her piece serves as a valuable reminder of the contingency of the legal and economic *status quo* and therefore the possibility of change, as well as how change might occur.

Next, Sabine Frerichs's piece provides an invaluable resource for those wishing to understand and engage with research at the intersection of law and economics, particularly where the focus concerns insights into law offered by the behavioural turn in economics. She sets out a masterful and nuanced account of this intricate disciplinary landscape by charting, firstly, different strands of realist thought in economics – in particular behavioural and institutional economics; secondly, the evolution of legal realism and the various behavioural sciences it has drawn on; thirdly, the different traditions of realist thought in law and economics, again with a focus on behavioural and institutional economics; and, finally, through a discussion of law and psychology, how both cognitive and social psychology can contribute to realism in law. Beyond that and most importantly, in response to claims that behavioural economics constitutes a new form of legal realism, exploring contributions from different strands of research in both economics and psychology, she shows that behavioural economics is one of many pathways by which realism may enter legal scholarship. Furthermore, by highlighting the tendency of behavioural economics to ignore institutional and social contexts, she reveals a potential tension between behavioural economics and legal realism.

In the third paper in this thematic grouping, Simon Deakin and Christopher Markou present an alternative model of legal evolution and argue for its use in describing the dynamics of legal change and the relationship between law and the economy. Through a discussion

grounded in evolutionary biology, game theory and systems theory, they provide an account of inheritance, an element of evolution often ignored by research in legal evolution, traditionally concerned with variation and selection, and thereby develop a fuller model of legal evolution. The value of this model is not, as with previous understandings of legal evolution, to provide support for normative claims regarding the superiority of common law systems for promoting economic growth or legal 'evolution to efficiency'. It is, instead, a descriptive theory, rather than a simple metaphor, which can generate claims regarding the relationship between law and the economy amenable to empirical testing. A discussion of methodological issues across three different approaches illustrates the potential of this model to shape empirical research into the co-evolution of law and the economy including the relationship between law and economic performance.

The second three papers we present offer more specific investigations into law in the economy.

In a call to look beyond neoclassical economics orthodoxy, Frank Stephen's paper challenges the approach to economic development typically promoted by multilateral development agencies, founded on narrow Chicago Law and Economics and commitments in legal origin theory to the superiority of common law over civil law in promoting economic growth. Stephen grounds his challenge on insights from new institutional economics and cross-cultural psychology which, amongst other things, take seriously the relevance of context on the effectiveness of laws in driving economic development – the former focusing on legal environment; the latter on the overarching influence of socio-cultural context. Drawing together these insights along with evidence concerning the success (or otherwise) of transplanting investor and creditor protection laws from common law jurisdictions to developing countries, Stephen rejects legal origin theory assumptions that, regardless of context, transplants will necessarily generate economic growth. The paper offers an example of how, with the aid of wider social science disciplines, dialogues might fruitfully be opened up between the law and mainstream economics.

Next, and developing Ruth Dukes's previous work on an economic sociology of labour law, Dukes and Eleanor Kirk delineate a new pathway for labour law research which builds on earlier socio-legal scholarship and which harnesses, in particular, the contribution of legal consciousness research to enhancing our understanding of actors' everyday perceptions of, and interactions with the law, in processes of mutual influence and change in the context of work. In a further novel step, they direct their attention beyond workers to human resources (HR) professionals as a powerful source of worker and societal beliefs about what is legal, fair, reasonable or appropriate in workplaces. By

exploring HR discourses, they show how applicable law, professional interests and managerial commitments to 'market realities' combine to produce legal ideologies which may shape workers' conceptions of legality while reinforcing capitalism more generally. In doing so, they establish a theoretical, socio-legal foundation for empirical exploration of HR professionals' subjective accounts of the law and associated social and economic structures.

In the final paper, Bruce G Carruthers examines claims that 'big data' has, in a sharp break with the past, helped usher in a new era of 'surveillance capitalism' characterised by the availability of an unprecedented quantity of information. Focusing on the role of information in both historical and current financial markets, he offers a detailed sociological analysis of the nature of information, exploring its velocity and variety – in terms of sources, formats, content and uses – as well as its volume. His analysis reveals continuities and discontinuities between past and present, both in the roles performed by information in financial decision-making and in the ways developments in information technologies test existing regulatory frameworks. The piece demonstrates the value of a sociological lens in enhancing and contextualising our understanding of 'big data'. In this instance it shows that, despite formidable challenges and contrary to dramatic claims that we are living in unique and novel times, in some ways, we have been here before.

Northern Ireland
Legal Quarterly
Winter Vol. 72 No. 4 (2021) 623–650
Article DOI: 10.53386/nilq.v72i4.936

Could alternative econolegal futures be made more possible and probable through prefigurative design? Insights from and for Cyprus

Amanda Perry-Kessaris[1]

University of Kent
Correspondence email: a.perry-kessaris@kent.ac.uk

ABSTRACT

This article draws attention to how designerly ways, especially prefigurative design, might make alternative relationships between law and economic life more possible and probable in Cyprus and elsewhere. In so doing, it draws attention to how designerly ways might support the development of more socialised, less determinate, understandings of law and economic life more generally.

Keywords: prefigurative design; legal design; law and economic life; Cyprus Problem; econolegal futures.

INTRODUCTION

How might the mindsets, processes and strategies that are characteristic of design-based practices make alternative relationships between law and economic life more possible and probable? How might these 'designerly ways'[2] be deployed across the public, private and third sectors to prompt and facilitate change in respect of, for example, whether and how law allows, enables, generates, shapes or prevents various forms of economic life; and whether and how law creates, sustains, destroys or balances various economic and non-economic values and interests?

This paper first introduces increasingly influential calls for public, private and civil society actors to co-define a common sense of public

1 Professor of Law, Kent Law School. I am grateful for funding from the Socio-Legal Studies Association and the Leverhulme Trust; to the many people across Cyprus who have shared their time and insights since 2012, especially those interviewees cited here; to Socrates Stratis for permission to reproduce images; to Deger Ozkaramanli for conversations that eventually fed into this paper; and to Andromachi Sophocleous, Allison Lindner, Clare Williams, Davina Cooper, Fleur Johns, Neophytos Loizides and Luis Eslava for comments. For logistics, laughter and love, thanks to Avgi.

2 Nigel Cross, 'Designerly Ways of knowing: design discipline versus design science' (2001) 17(3) Design Issues 49.

purpose; and then to shape economic life to further that purpose, using both law and design. It then considers how such an approach might be applied to address the question of island-wide economic life in divided Cyprus. It highlights the extent to which the necessary expertise to adopt such an approach is present on the island; and concludes that, in Cyprus and elsewhere, prefigurative design strategies might prompt and facilitate the emergence of a common sense of public econolegal purpose, even in the absence of public leadership.

DIRECTING LAW AND DESIGN TOWARDS PUBLIC ECONOMIC PURPOSE

As commentators from the periphery of the discipline and beyond have long observed, dominant attitudes within economics towards the actual and potential relationships between states and markets – and, more specifically, between law and economic life – tend towards the inaccurate and the inappropriate. Contemporary approaches to economics tend to prioritise market-based approaches to defining and addressing problems: most contemporary introductory economics courses present public authorities as background actors that ought generally to sit back and allow economic life to occur; and to intervene – whether through regulation or light-touch nudging – only in order to address 'market failures' such as information asymmetries, excessive transaction costs and market dominance.[3] Of course, expert economists from across the spectrum go on to add a great deal of nuance to this understanding of relationships between states and economic life. But, even as meta-level debates around the importance and function of nation states ebb and flow, the idea that markets come first – temporally and normatively – is latent in the core assumptions that shape the basic models through which most economists think and communicate.[4] What is less often observed within mainstream economics is that states and their laws in fact go well beyond merely facilitating market-based interactions and fixing market failures:[5] they systematically 'insulate' or 'encase' market interactions from the wider world so that private value and purpose can be more effectively generated and secured.[6] Indeed, a deep engagement by states and their laws in economic life is in fact central to the neoliberal vision that contemporary mainstream economics

3 For a critical assessment of economics pedagogy, see the CORE Project.

4 Dani Rodrik, *Economic Rules: Why Economics Works, When it Fails and How to Tell the Difference* (Oxford University Press 2016).

5 Robert L Hale, 'Coercion and distribution in a supposedly non-coercive state' (1923) 38(3) Political Science Quarterly 470.

6 Quinn Slobodian, *Globalists: The End of Empire and the Birth of Neoliberalism* (Harvard University Press 2018).

tends to promote. For example, as Katharina Pistor puts it, states and their laws create, and support the efforts of non-state actors to create, mechanisms for 'coding' a mere asset, such as an object, claim, skill, or idea as capital. This coding occurs through laws of contract, property, collateral, trust, corporate and bankruptcy which bestow upon the asset the characteristics of 'priority', 'durability', 'universality' and 'convertibility' that are necessary for them to operate as capital – that is, as something upon which the holder can capitalize, and benefit from further than if they held only the original, uncoded, asset. State courts and bureaucracies 'scal[e]' these benefits by coordinating disputes over who holds what, as well as by supporting private coordination mechanisms.[7]

Robert L Hale observed in 1923 that an important consequence of economic mythology around the free market was a dearth of practical economic and legal theory around how the state ought, as it inevitably will, to manage markets well. This remains a concern to this day. But there are reasons to be hopeful. For legal inspiration we can, for example, draw on sociologically informed approaches which understand legal and economic life, empirically and conceptually, as a social phenomenon – that is, as existing in, shaping and shaped by human interactions and systems, including the values, interests and mindsets that underpin and motivate them.[8] Looking through a sociologically informed lens it becomes clear that real world relationships between law and economic life are necessarily characterised by multiplicity and indeterminacy in relation to both means and ends – for example, economic interactions are prompted by multiple motivations beyond mere utility maximisation, and multiple mindsets beyond mere individualism.[9] Libertarian economists may, perhaps citing Frederich Hayek, argue that the proper response to such complexity is for states to lean back and allow individual rational utility maximizers to battle it out; and neoliberal economists may argue for the promotion of private value and private purpose through devices such as the re-coding of assets into capital. But looking through a socio-legal lens allows us to embrace multiplicity and indeterminacy in a more hopeful way:[10] to promote law as communal resource – one which ought to be both

7 Katharina Pistor, *The Code of Capital: How Law Creates Wealth and Inequality* (Princeton University Press 2019) ch 1.

8 See, for example, Amanda Perry-Kessaris, 'Approaching the econo-socio-legal' (2015) 11(16) Annual Review of Law and Social Science 1. For a critical legal studies perspective, see, for example, Duncan Kennedy, 'form and substance in private law adjudication' (1976) 89 Harvard Law Review 1685.

9 Amanda Perry-Kessaris, *Doing Sociolegal Research in Design Mode* (Routledge 2021).

10 Annelise Riles, 'Is the law hopeful?' in Hirokazu Miyazaki and Richard Swedberg (eds), *The Economy of Hope* (University of Pennsylvania Press 2016).

practically available to, and capable of expressing and coordinating the values and interests of, all who fall within its jurisdiction; and that ought to have the 'utopian, aspirational' capacity to prompt and facilitate change, especially towards econolegal futures that are broadly desired.[11]

For economic inspiration we can look to the increasingly influential work of Mariana Mazzucato, whose approach is highly compatible with, and open to enhancement from, the above described sociologically informed approaches. She argues that states ought to direct their econolegal powers beyond simply facilitating and securing private purposes and interests, and towards public purpose and public value. Traditional visions of state-led change have tended to emphasise the ability of public authorities to nurture and promote long-term, progressive, communal concerns. Similarly, Mazzucato argues that states are best placed to shape and direct economic activity towards public purpose. However, she also emphasises that states can, and ought to, be as innovative and entrepreneurial as non-state actors.[12] Furthermore, challenging the long-standing tendency of those approaching from the left as well as from the right to pitch markets against states, she advocates symbiotic, rather than exclusionary or extractive, relationships. She suggests that states must collaborate with private and civil society actors, in entrepreneurial and innovative spirit, to 'co-creat[e]' ambitious, transformative 'missions' that prioritise a co-defined sense of public purpose and public value; and then they must 'shap[e]' economic life towards achieving them.[13] The emphasis is on experimentation, in the sense that the aim is less to fix pathways or destinations, more to 'set the direction' in which solutions will be sought; and to manage that search in the form of a 'portfolio of actions', some of which are expected to fail. Crucially, given the core argument of this article, Mazzucato and her co-authors argue that such attempts to generate econolegal change ought to be treated as 'complex

11 Roger Cotterrell, 'Seeking similarity, appreciating difference: comparative law and communities' in Andrew Harding and Esin Örücü (eds), *Comparative Law in the 21st Century* (Kluwer 20021) 643. See further Roger Cotterrell, *Sociological Jurisprudence: Juristic Thought and Social Inquiry* (Routledge 2018).

12 Mariana Mazzucato, *The Entrepreneurial State: Debunking the Public vs Private Myths in Risk and Innovation* (Anthem Press 2013). For a sociologically informed review of entrepreneurship studies, see Howard E Aldrich, 'Entrepreneurship' in Neil J Smelser and Richard Swedberg (eds), T*he Handbook of Economic Sociology* (Princeton University Press 2005).

13 Mariana Mazzucato, *Mission Economy: A Moonshot Guide to Changing Capitalism* (Allen Lane 2021). See also Rainer Kattel et al, 'The economics of change: policy appraisal for missions, market shaping and public purpose' (2018) UCL Institute for Innovation and Public Purpose Working Paper Series (IIPP WP 2018-06) 6 and 10.

design problems'; and that they should explicitly draw on the literature and practices of design, especially service-design with its focus 'on user experience and co-creation practice'.[14] Why? Because questions of econolegal change are 'dynamic, open, complex and networked'.[15] As such they are 'mess[y]', 'ambiguous', interconnected, 'unpredictable' and, therefore, indeterminate. Designers refer to these challenges as 'wicked problems'[16] and argue that they are best addressed through designerly ways.[17]

Recent decades have seen an explosion of interest in how designerly ways might be deployed by non-designers to enhance their practices in a wide variety of private, public and civic sites.[18] Answers to this question have come in an enormous variety of shapes and sizes, and, although it is generally agreed that they have a common core, opinions differ as to the precise content of that core, and as to how to express it. As a socio-legal researcher with interests in the economic lives of law and of design, I see design-based approaches as characterised by mindsets that are 'practical-critical-imaginative': critical in the sense of being able to 'identify opportunities for change'; imaginative in the sense of being able to 'envisage what the shape of those changes, and their effects, might be'; and practical, in the sense of being able to ensure that the change is 'valuable to those who are implicated in and by it', as well as to make that change happen. Many ways of thinking, including legal thinking, operate across these three dimensions. What distinguishes designerly ways is that they promote thinking and action that is *simultaneously* practical-critical-imaginative; and that they do so through processes that emphasise experimentation, and through strategies that emphasise making things visible and tangible. The combined effect of these designerly mindsets, processes and strategies is to generate 'structured-yet-free' spaces in which we can proactively embrace the indeterminacy inherent in dynamic, complex, open and networked situations. In the resulting 'enabling ecosystems' our ability individually and communally to make and communicate a sense of

14 Kattel et al (n 13 above) 5, 6, 8, 11 and 21.

15 Kees Dorst, *Frame Innovation: Create New Thinking by Design* (MIT Press 2015) 6–12.

16 Horst W J Rittel and Melvin M Webber, 'Dilemmas in a general theory of planning' (1973) 4 Policy Science 155. The concept was later developed and popularised by Richard Buchanan in 'Wicked problems in design thinking' (1992) 8(2) Design Issues 5.

17 Colin Burns et al, *Transformation Design* Red Paper 2 (Design Council 2005) 8.

18 Political scientist and cognitive psychologist Herbert A Simon declared in 1969 that design is/ought to be a systematic, 'process-oriented activity' for solving a wide array of problems; and even 'glue' the social sciences together: D J Huppatz, 'Revisiting Herbert Simon's "science of design"' (2015) 31(2) Design Issues 29.

things is enhanced; and, therefore, meaningful change can become more possible and probable.[19]

Together with policy design specialist Christian Bason and others clustered in and around the Institute for Innovation and Purpose (IIPP), Mazzucato has welcomed the European Union's (EU) plan to support its 'mission-oriented Green Deal' with a 'New European Bauhaus' – an interdisciplinary initiative intended to create 'a space of encounter' in which those living in Europe can co-'imagine' and then 'build' a 'beautiful', 'sustainable and inclusive future'.[20] Like its early twentieth century German namesake, the new Bauhaus is expected to draw explicitly on expertise from design, art, architecture, craft and making.[21] Bason and co-authors see this as significant because, although a role for design is always 'implicit within the way that these new missions will be conceived, imagined, produced and delivered', an explicitly design-led approach can make mission-oriented innovation more possible and probable.[22] They emphasise in particular the potential of the designerly practice of experiential prototyping as a way to test ideas and to engage widespread participation. Experts from across the spectrum of design-based disciplines make their ideas visible and tangible in prototypes as they go along, not only in order to test their viability, but also as a way of thinking things through, whether individually or in collaboration with others. Some design-based practitioners also create digital or material prototypes specifically in order to allow others – such as their clients, or members of the public – to explore, respond to and reflect upon objects, places or experiences that are possible, but that do not yet exist. We can think of these designers as surfacing speculative 'what if' questions, and then making them visible and/or tangible in order that we can behave prefiguratively 'as if' an alternative future were already present; and so that in the process we can individually and collaboratively make sense of what futures we may or may not want, and why.[23] To act prefiguratively is to 'perform present-day life in the terms that are

19 Perry-Kessaris (n 9 above). My summary draws on a wide range of design research, especially the terminology of Ezio Manzini in *Design, When Everybody Designs: An Introduction to Design for Social Innovation* (MIT Press 2015) who argued that designers are 'practical, critical and creative'; and emphasised the significance of designers' ability to 'make things visible and tangible'.

20 New European Bauhaus website.

21 Christian Bason et al, *A New Bauhaus for a Green Deal* (University College London 2021).

22 Ibid 8.

23 See Anthony Dunne and Fiona Raby, *Speculative Everything: Design, Fiction, and Social Dreaming* (MIT Press 2013); Ramia Mazé, 'Design and the future: temporal politics of making a difference' in Rachel Charlotte Smith et al (eds), *Design Anthropological Futures* (Bloomsbury Publishing 2016).

wished-for', both in order 'to experience' a 'better' present, and in order 'to advance' future 'change'.[24] Research and activism from politics and, more recently, law tells us that prefigurative thinking and action opens up critical, optimistic spaces in which actual presents can be improved and potential futures can become more probable.[25]

Arguments for ambitious, mission-oriented, design-driven, symbiotic approaches are especially powerful today in the face of long-term global crises such as climate change and medium-term global crises such as the ongoing pandemic, for which nothing short of transformative, publicly oriented, co-generated and co-owned responses will do.[26] But they also hold promise for more localised and specific challenges, including that upon which the remainder of this paper focuses: law and island-wide economic life in divided Cyprus.

The following sections explore how some private and civil society actors in Cyprus act prefiguratively 'as if' island-wide econolegal systems were already present, and how public actors could, but generally choose not to, do the same; then how prefigurative design practices might make alternative relationships between law and economic life more possible and probable in Cyprus and elsewhere.

LAW AND ISLAND-WIDE ECONOMIC LIFE

The island of Cyprus has been divided to varying degrees and on multiple dimensions since the 1950s when competing visions began to emerge for the postcolonial future of the island. The most extreme of these visions were posed by some in the majority Greek Cypriot community who pushed for British rule to end in union with Greece; and some Turkish Cypriots, the largest minority community, who preferred the island to unify with Turkey or be partitioned between Turkey and Greece. The 1960 constitution under which the island became independent sought to balance these visions externally, by identifying Greece, Turkey and the UK as guarantor powers; and internally, by among other things reserving the posts of president for a Greek Cypriot and vice-president for a Turkish Cypriot. But it soon broke down amid inter-communal violence. Turkish Cypriots were pushed/withdrew from power sharing

24 Davina Cooper, 'Prefiguring the state' (2017) 49(2) Antipode 335, 335.

25 See further Marianne Maeckelbergh, 'Doing is believing: prefiguration as strategic practice in the alterglobalization movement' (2011) 10(1) Social Movement Studies 1; Margaret Davies, *Law Unlimited* (Routledge 2017).

26 'Tentative reasons for hope can be found in the fact that calls for a Green New Deal are now at the heart of EU and United States policy. See, for example, The Green New Deal Group website and 'The Biden Plan for a Clean Energy Revolution and Environmental Justice'. Furthermore, participatory democracy seems more possible and probable in light of innovative use in the Republic of Ireland of citizens' assemblies.

and were pushed/retreated into 'enclaves' where they developed separate systems of administration and became increasingly isolated from the wider economic life of the island and dependent on aid from Turkey.[27] The constitutional order was suspended, the Republic of Cyprus became a *de facto* Greek Cypriot state; and in 1964 a United Nations (UN) monitored buffer zone was carved through the island which came to be known as the Green Line. It was observed at the time that 'an economic war has started between the two communities who do not buy each other's products', leading 'to the creation of small, high cost and inefficient productive units' – a 'situation' that was 'damaging to all Cypriots.'[28] Matters worsened further in 1974, when an attempted coup by Greek Cypriot extremists, with the backing of the military junta in Greece, was followed by the invasion and occupation of the northern third of the island by Turkey. About a third of the island's population was displaced, leaving the area to the north of the Green Line predominantly Turkish Cypriot and the south of the island predominantly Greek Cypriot.[29] Island-wide interactions almost ceased from 1974 and, because no state other than Turkey has recognised the north's 1983 unilateral declaration of independence as the Turkish Republic of Northern Cyprus (TRNC), economic actors in the north have since faced substantial legal constraints when seeking to participate in international trade and investment.[30]

---

27 Turkish Cypriot *per capita* income dropped from an average 20 per cent lower than that of Greek Cypriots in 1961, to an average 50 per cent lower than that of Greek Cypriots in 1971: Mete Hatay, Fiona Mullen and Julia Kalimeri, *The Day After I: Commercial Opportunities Following a Solution to the Cyprus Problem* (PRIO Centre Cyprus 2008) 8. For a succinct summary of the Cyprus Problem, see James Ker-Lindsay, *The Cyprus Problem: What Everyone Needs to Know* (Oxford University Press 2011).

28 Hatay et al (n 27 above) 8 quoting Nicos C Lanitis.

29 I avoid referring to 'the two communities' because it implies unity on 'each side'; forgets that everyone is a member of multiple communities; and erases the many other peoples of Cyprus, including old-timer Maronites and Armenians, post-1974 arrivals from Turkey, as well as new-comer university students from Nigeria, domestic workers from Sri Lanka and the Philippines, retirees from the UK and business people from China.

30 For example, Case C-432/92 *Anastassiou* [1994] ECR I-3087 established that proof of origin certificates issued in the north could not be accepted by EU Member States because the TRNC is not recognised. Goods originating in the north of the island were suddenly treated as third-country goods, not covered by the EU–Cyprus Association Agreement, and therefore subject to tariffs. This third-country status continued after the 2004 accession of Cyprus to the EU. Furthermore, traders in the north still cannot export goods direct to the rest of the world, because their ports and airports in the north are not recognised internationally. Instead they must incur the costs of transhipment in Turkey: Fiona Mullen, Özlem Oğuz and Praxoula Antoniadou Kyriacou, *The Day After I: Reconstructing a Reunited Cyprus* (PRIO Centre Cyprus 2008) 37.

In early 2003 the authorities in the north unexpectedly opened the main checkpoint at Ledra Palace, and Cypriots were able to move back and forth across the Green Line.[31] The next year referenda were held on each side of the island on whether to adopt a reunification plan presented by UN Secretary General Kofi Annan. In the north 65 per cent voted in favour, but in the south 75 per cent voted against. So, one week later, in May 2004, the island of Cyprus joined the European Union (EU) still divided along the Green Line. In EU legal theory, the Green Line 'is not an external border of the EU', and, although the 'non-government-controlled areas' in the north 'are outside the EU's customs and fiscal territory ... this does not affect the personal rights of Turkish Cypriots as EU citizens'.[32] But in reality the Green Line is a *de facto* external border of the EU; and the abilities of those who live in Cyprus to lead island-wide lives are constrained. Multiple attempts led or backed by the UN to support the reunification of the island as a 'bi-communal bi-zonal federation' have failed,[33] and every aspect of life on the island continues to be structured – directly or indirectly, consciously or unconsciously – with reference to the intractable black box of the 'Cyprus Problem'.

The so-called 'Green Line Regulation' was introduced in 2004 to protect the EU Single Market from the uncontrolled movement of goods from the north, where the internationally recognised government of the Republic of Cyprus does not exercise effective control and the *acquis communautaire* is suspended, to the south of the island where it does.[34] The effect of this and associated regulations is that people, (some) vehicles and a limited range of (only) Cypriot-origin goods can cross to the south (only) at designated points without incurring customs duties or charges. In order to qualify, goods must have been wholly obtained, or their last substantial economically justified processing undergone, in the north of Cyprus; be covered by an 'accompanying document' from the chamber of commerce in the north; and have been veterinary, phytosanitary and food safety checked by EU-authorised experts

31 Hatay et al (n 27 above) 9.

32 EU Green Line Regulation website.

33 See UN Cyprus Talks website.

34 Council Regulation (EC) 866/2004 of 29 April 2004 on a regime under art 2 of Protocol 10 to the Act of Accession [2004] OJ L161/128. See also art 2 of Protocol 10 to the Act of Accession, Official Journal, L 206, 9.6.2004. A proposed regulation to allow goods from the north to travel direct to the rest of the EU has never come to fruition: Commission (EC), 'Proposal for a Council Regulation on special conditions for trade with those areas of the Republic of Cyprus in which the Government of the Republic of Cyprus does not exercise effective control' COM 466 07 July 2004.

before crossing.[35] This regime is mirrored by policies introduced in the north to regulate the movement of goods from south to north.[36] The crossing of live animals or animal products was banned under the 2004 Regulation, but a 2005 amendment to the Regulation opened the possibility of partial relaxation.[37] So, for example, fish and honey from the north can now pass if their producers have been certified by EU-authorised inspectors. But the authorities can and do refuse to allow even goods of Cypriot-origin to pass. Most notably authorities in the south refuse to allow processed foods, even of non-animal origin, to cross on the grounds that they are unable to inspect factories in the north, and therefore cannot guarantee that goods meet EU standards. The provision of island-wide services is not directly regulated, but is indirectly constrained by the same practicalities that face traders in goods, such as how to make payments or enforce contracts given the non-recognition in the south of banks and courts in the north.[38] And crucially there remains a general uncertainty among public and private and civil society actors as to what might be allowed, and how, or whether, to go about it.

---

35 Arts 4.1, 4.3–4.5 and Annex II of Council Regulation (EC) 866/2004 (n 34).

36 The Green Line Regulation prompted an amendment to the rules in the north to allow 'importing from the south' for the first time since the island was divided. Goods entering the north of Cyprus from anywhere require prior permission from the Ministry of Trade. In order to enter via the Green Line imports must also be accompanied by a certificate of origin from the Cyprus Chambers of Commerce and Industry (CCCI) (the chamber of commerce in the south), proving that they originate on the island; and they VAT must be paid twice – once in the south where trade with the north is coded as a domestic transaction, and again in the north where trade with the south is coded as an international transaction: Interview with (Nicosia, 12 December 2018) and statement by (Email correspondence 15 May 2021) Kemal Baykalli, Activist in Unite Cyprus Now and former Deputy General of Turkish Cypriot Chamber of Commerce (KTTO). See further the 'Guide for Foreign Investors' issued by the State Planning Organisation of the TRNC in June 2009.

37 Council Regulation (EC) 293/2005 of 17 February 2005 amending Regulation (EC) No 866/2004 on a regime under Article 2 of Protocol 10 to the Act of Accession as regards agriculture and facilities for persons crossing the line [2005] OJ L50/1, art 4.9.

38 After years of pressure by chambers of commerce and others, it finally became possible, if only by routing calls through a roaming hub in Switzerland, to use a single mobile number island-wide in 2019: Evie Andreou, 'Mobile phone links established between two sides' (*Cyprus Mail* 11 July 2019); Interview with Kemal Baykalli (n 36 above).

The costs of the *status quo* are high.[39] For example a 2014 report for the PRIO Cyprus Centre estimated that if ongoing attempts at the reunification of Cyprus had succeeded, all-island gross domestic product (GDP) (at constant 2012 prices) would have doubled over the next 20 years from around €20 billion in 2012 to just under €45 billion in 2035, as compared to an estimated €5 billion rise over the same period in the absence of a solution.[40] Those gains would arise through, for example, access for those in the north to international markets, and those in the south to Turkish markets; and economies of scale and scope in tourism, shipping and higher education as well as trade in goods. This quantification of the 'peace dividend' made a significant impact during the run-up to the most recent round of UN-backed negotiations about the political future of the island in 2017: the economic case for resolution was referenced by senior political figures for the first time in over four decades, opening the door to the idea that island-wide economic life might have public value, and to the possibility of its promotion as a public purpose. But that possibility has not been pursued, and all forms of island-wide life, including economic, are openly contested in public spaces. Indeed, it can be difficult, even for the most experienced and well-networked of investigators, simply to research the subject.[41]

Surveys since 2004 have consistently revealed a critical mass of openness among those living on each side of the island to interacting

39 In 2019 the 'economic impact of violence' in the Republic of Cyprus – direct costs, indirect costs including psychological effects and productivity losses, and 'multiplier effects' – was estimated to be equivalent to 30 per cent of its GDP – the seventh highest in the world, primarily due to the loss of property by refugees in the 1960s and 1970s: Institute for Economics and Peace, *The Economic Value of Peace 2018: Measuring the Global Economic Impact of Violence and Conflict* (Institute for Economics and Peace 2018).

40 Fiona Mullen, Alexandros Apostolides and Mustafa Besim, *The Cyprus Peace Dividend Revisited: A Productivity and Sectoral Approach*, PRIO Cyprus Centre Report 1/2014 (PRIO Cyprus Centre 2014). For recent estimates, see Fiona Mullen, Mustafa Besim and Michalis Florentiades, *Delivering the Cyprus Peace Dividend*, PRIO Cyprus Centre Report 1/2020 (PRIO Cyprus Centre 2020). For current situation, see UN Cyprus Peace Talks website.

41 One report exploring the scale and character of contemporary island-wide economic life noted that all interviewees requested confidentiality, few trusted it would be maintained, and many were too nervous to be interviewed at all: Hatay et al (n 27 above) 4–5.

with those living on the other side.[42] They have also revealed substantial psychological barriers: in the south economic actors tended to hold back for fear of being accused of treachery by their compatriots; and in the north for fear of humiliation by wealthier southerners and their internationally recognised institutions.[43] We know that low levels of social cohesion and/or propensity to reconciliation are obstacles not only to peace, but also to wellbeing more generally; and that intergroup contact, whether self-initiated or gently cajoled, can promote trust and then further wider contact.[44] Hence the continuous, unheeded, calls by the civil society actors who produce these social attitudes surveys for public authorities to lead the way in shifting public thinking and action.[45]

The day-to-day operation of the Green Line system relies primarily on two types of non-state actors: internationally recognised private sanitary and phytosanitary inspection, audit and certification service providers such as Bureau Veritas; and the chambers of commerce in the north and south. Because they were formed before the division, the chambers of commerce are each in the rare position of being recognised on the other side. Consequently, they are called upon to act variously as economic go-between, certifier, repository, information point and so on; and each has from time to time, when their leaders and members have been aligned in favour, or at least not against, played a

42 The Centre for Sustainable Peace and Democratic Development (SeeD) produces the SCORE index of social cohesion and propensity to reconciliation among Cypriots by combining qualitative data from randomly administered questionnaires and follow-up face-to-face interviews: *Predicting Peace: The Social Cohesion and Reconciliation Index as a Tool for Conflict Transformation* (UN Development Programme 2015) and Interview with Metlem Ikinci, Cyprus Programme Lead and Learning and Innovation Officer, SeeD (Nicosia 22 June 2016). See also Charis Psaltis et al, *Youth and Politics in Protracted Conflicts: A Comparative Approach on Hope for a Settlement and Return of IDPs* (Hellenic Observatory 2021); and Sertaç Sonan, Ebru Küçükşener and Enis Porat, *Politics and Society in North Cyprus* (Friedrich-Ebert-Stiftung Cyprus Office 2020).

43 Hatay et al (n 27 above) 2. See also Alexandros Apostolides, Costas Apostolides and Erdal Güryay, 'From conflict to economic interdependence in Cyprus' (2012) 24(4) Peace Review: A Journal of Social Justice 430, 433.

44 Shelley McKeown and Charis Psaltis, 'Intergroup Contact and the Mediating Role of Intergroup Trust on Outgroup Evaluation and Future Contact Intentions in Cyprus and Northern Ireland' (2017) 23(4) Peace and Conflict: Journal of Peace Psychology 392.

45 See SCORE (n 42 above) 10; Hatay et al (n 27 above) 2. Public authorities cannot support trust if they are not themselves trusted, as is reportedly the case in the north and the south: See, for example, SCORE website generally for population trust in government institutions in 2016.

more proactive role in promoting island-wide economic life.[46] Public authorities in Cyprus could, but generally choose not to, lead efforts to co-define to what extent, and in what forms, island-wide economic life might be seen as a public purpose – something that has public as well as private value and that ought to be allowed, facilitated and generated. Instead such initiatives tend to come from outside. The EU supports island-wide economic life as part of an aid programme introduced in – many would argue, inadequate – recognition of the negative impact on those living in the north of the decision to allow a divided Cyprus to become a member state. The programme places 'particular emphasis on the economic integration of the island, on improving contacts between the two communities and with the EU, and on preparation for the *acquis communautaire*'.[47] Its work is severely constrained by, for example, the general uncertainty around what is allowed, the need to avoid impacting on the immovable property rights of refugees who fled south in 1974, and the fact that the chamber of commerce in the north is 'totally overburdened'.[48] But it offers some insight into how public authorities might support island-wide economic life, especially by improving access to legal information through information campaigns and training sessions.[49]

Public authorities in Cyprus could, but generally choose not to, support and nurture island-wide interactions by offering more comprehensive and accessible legal frameworks upon which people can fall back when their interpersonal trust falters; and by encouraging people to use them. A bicommunal Technical Committee on Economy and Entrepreneurship was established as part of the UN-sponsored peace talks in order to promote confidence building measures between the two sides, which is formed of experts appointed

46 See Bureau Veritas website. The website of the CCCI in the south hosts a discretely placed guide to 'Trade between Greek Cypriots and Turkish Cypriots'; and the website of the KTTO in the north hosts a prominent page on the Green Line Regulation including trade statistics and application forms. See also Leading by Example, an EU-funded CCCI–KTTO collaboration effort generate island-wide internships.

47 Article 1, Council Regulation (EC) No 389/2006 of 27 February 2006 establishing an instrument of financial support for encouraging the economic development of the Turkish Cypriot community and amending Council Regulation (EC) No 2667/2000 on the European Agency for Reconstruction; known as the 'Aid Regulation'. See further, the EU Aid Programme for the Turkish Cypriot community which is managed by the EU Directorates-General for Structural Reform. The World Bank and the European Bank for Reconstruction and Development have also supported island-wide programmes, but the activities of international organisations are beyond the scope of this paper.

48 Interview with expert requiring anonymity (Nicosia 23 April 2018).

49 Much of this work is provided by the EU Infopoint, AB Bilgi, located northern Nicosia.

by public authorities on each side and has generated some *ad hoc* solutions to problems over the years. But its ability to progress is dependent on the prevailing political winds, and it must generally rely on the chambers of commerce for implementation. For example, in response to the ongoing pandemic, the Committee worked with the chambers of commerce to facilitate 'contactless transactions'– that is, trade of products without any physical contact;[50] but on the other hand public authorities disrupted island-wide economic life by the chaotically, at times almost 'competitively', closing and opening of crossing points at different times, according to different criteria.[51] In the years since the introduction of the Green Line Regulation there have been few clear, overt instances of collaboration between pubic authorities. One especially high-profile example in which they worked broadly simultaneously, albeit not together, in support of island-wide economic life has been their preparatory work around the registration of *Χαλλούμι*/Halloumi/Hellim as a Protected Designation of Origin (PDO) with the European Commission.[52] The process took almost 15 years, was tortuous and almost failed. But it was significant not only because, in the words of one Commissioner, it 'shows that mutually beneficial solutions are possible', but also because it reduced some obstacles to northern Cypriot engagement in island-wide and international economic life: it was the first time that animal-based products were allowed to cross the Green Line from the north into the south; the first time that an island-wide regulatory system, in the form of an EU PDO inspection programme, had been created.[53] Indeed, we might think of it as a 'pilot' or 'mini' version of the collaborative co-creative processes that public authorities will need to engage in to generate alternative futures for the island more generally.[54]

The clearest examples of support for island-wide interactions, and an emergent common sense of island-wide economic life as public purpose, are to be found among private and civil society actors. There have always been entrepreneurial Cypriots who have interacted, economically and otherwise, with the other side. Technical experts responsible for the provision of essential services such as electricity and sewage treatment have quietly pooled resources to respond to everyday issues such as

50 UN Security Council, *Report of the Secretary-General on his Mission of Good Offices in Cyprus* (S/2020/685) 19.

51 Esra Aygın and Yiorgos Kakouris, 'Episode 1: podcasts, scandals and virus spin' (Buffering 17 June 2020).

52 See 'Trade Cooperation between G/C and T/C Entrepreneurs Relaunched Amid COVID-19 Pandemic' In-Cyprus (Nicosia 15 May 2020).

53 EU Green Line Regulation website (n 32 above).

54 Interview with Burcu Barın, trade expert, TRNC Prime Minister's Office EU Coordination Centre (Nicosia 23 June 2017).

sewage treatment, or the provision of emergency electrical supply;[55] individuals have formed personal relationships; and civil society actors have engaged in 'bi-communal' initiatives.[56] Since 2003 many Cypriots have crossed in both directions 'with minimal encouragement' not only for the chance to see the long-forbidden other side, but also to engage in relatively *ad hoc* and self-contained economic activities such as shopping, visiting casinos or heritage tourism; as well as, especially from north to south, for employment, to sell goods such as vegetables, or to provide services such as driving taxis or construction work.[57] Many now see private value in island-wide economic life, and they pursue it for their private purpose, although they may not always feel comfortable saying so, and they may be criticised for it.

Of particular interest are those who have engaged, or sought to engage, in more systematic and sustained island-wide economic life. A recent study compiled for the EU includes a range of specific examples of farmers, fisherfolk and manufacturers in the north and the south who have begun with narrow, *ad hoc* economic interactions with the other side; and eventually developed deeper, broader, more sustained economic, as well as other social, relationships. For example, they report that 'Green Line Trade has brought us closer', 'I've expanded my business', 'now we have larger [machines] and they are more productive', 'we now have more clients [and] more dialogue with our clients and their contacts'.[58] However, such ventures can be risky. When southern-based farmer Christos Christofi drew on his expertise as the largest producer of potatoes on the island to advise farmers in the north on which potatoes to grow for which markets and when and agreed to buy large quantities of their potatoes for export through his existing network primarily to the EU, he was met with protests and arson threats from potato farmers, exporters, and even serving Members of Parliament in the south, who (erroneously) claimed that

55 For cooperation on emergency electricity supply, see Apostolides et al (n 43 above) and see the arrangements that preceded the opening of the Nicosia Wastewater Treatment Plant in 2013.

56 Zenonas Tziarras, *Pre-Conditions for Peace: A Civil Society Perspective on the Cyprus Problem*, PRIO Cyprus Centre Report 1/2018 (PRIO Cyprus Centre 2018). See also the Stelios Foundation awards to individuals and groups engaging in bi-communal cooperation in any aspect of their lives.

57 Apostolides et al (n 43 above) 433.

58 Ecorys, *Bringing Cypriot Communities Closer Together: EU Promotes Free Movement Across Cyprus* (2019) Report prepared for the EU DG REFORM available via the Green Line Regulation website (n 33 above).

he was acting illegally.[59] He would like to supply potatoes from the north directly to supermarkets in the south, but wants to shield his family and workers from the possibility of backlash. On the other hand, another, more intentionally high-profile example which does not seem to have attracted the same kind of animosity is Colive, which combines olives from across the island to produce premium oil primarily for export. Such an explicitly island-wide production process was novel. Every step of the process of engaging with authorities to set it up was characterised by high uncertainty and high cost and required new solutions, many of them sub-optimal. Co-founder Hasan Siber observes that their questions piqued the interest of lawyers and accountants, who then went on to make their services available for other entrepreneurs in future via CyprusInno, which is discussed further below.[60]

We can think of these entrepreneurs as generating, or seeking to generate, island-wide 'networks of community'[61] – that is, stable and trusting relations that centre on shared values, such as innovation; and interests, such as expanding markets for their goods or services. Such entrepreneurial networks often make important contributions to peace by first '*creat[ing]* doors and then open[ing] them'.[62] In Cyprus these networks are sometimes reinforced by shared attitudes as to the island's histories; or as to how, if at all, the political division of the island ought to be resolved. This wider context is not of central relevance to this article, which focuses on the fact that these entrepreneurs are pushing through the tangle of legal uncertainty and interpersonal and institutional distrust to act as if an integrated island-wide econolegal system were already here.

By acting prefiguratively as if integrated island wide econolegal systems were already here, and conjuring an ecosystem in anticipatory support of it, these entrepreneurs, and indeed the civil society actors who have tracked their progress, have made such a future more

59 Interview with Christos Christofi, farmer (Larnaca 17 December 2016). See further, Jean Christou, 'Businessman attacked for exporting potatoes from the north' (*Cyprus Mail* 31 August 2016), Christofi's actions are all the more powerful given that, from the land he rents for his packaging facilities in the south, he can see the farm his parents had to abandon on the other side.

60 Interview with Hasan Siber, co-founder and co-director of Colive (Nicosia 2 May 2019). See further Pour for Peace and Alix Norman 'Bicommunal project produces "rarest olive oil in the world"' (*Cyprus Mail* 30 July 2018).

61 Roger Cotterrell, *Law, Culture and Society: Legal Ideas in the Mirror of Social Theory* (Ashgate 2006).

62 For example, they can generate new economic opportunities where the private sector is weak and connections to the wider world are constrained, as in the north of Cyprus; be 'advocates for change', including to legal frameworks; and model productive inter-communal relations: Steven Koltai, *Peace through Entrepreneurship: Investing in a Startup Culture for Security and Development* (Brookings Institution Press 2016) 40–42 and 171.

possible and more probable. But the legal framework for island-wide economic life remains patchy and uncertain. It is the result almost of happenstance – a series of events, each of which was unintended or unwanted by most. It requires constant costly and fragmented workarounds. And discussion around whether island-wide economic life ought to be nurtured or promoted remains muted.[63] What to do?

The following section speculates about how designerly ways might be deployed to prompt and facilitate efforts to co-define a common sense of public value and public purpose around law and island-wide economic life, even in the absence of public leadership. Might public authorities then be prompted and facilitated to co-generate, and shape markets towards, econolegal missions that support that common sense?

PREFIGURING ALTERNATIVE ECONOLEGAL FUTURES

Yael Navaro-Yashin uses the concept of 'make-believe' to capture the ways in which all public authorities seek to materially and politically 'craft' the public imagination through, among other things, maps, passports and title deeds.[64] This make-believe work is especially urgent in Cyprus where vibrant traces of the past are to be found everywhere, not only in the bullet-scarred walls and the abandoned homes of refugees, but also in public institutions and their documents and, therefore, in all 'social, political, legal and economic transactions'.[65] We can think of make-believe as entailing two acts: making-to-believe and believing-to-make. Each act has an almost prefigurative quality in the sense that it involves acting 'as if', but it is more about acting as if the present were not what it is, than about acting as if a preferred future were already here. Indeed, future imaginaries do not feature

63 Indeed, some island-wide economic acts are treated as actively undermining 'the' public purpose – perhaps none more so than the relinquishing by Greek Cypriot refugees, in exchange for compensation, of their rights to immovable property abandoned in 1974. See Immovable Property Commission website.

64 See Yael Navaro-Yashin, *The Make-Believe Space: Affective Geography in a Postwar Polity* (Duke University Press 2012) 6, 28–29, 31 and ch 4.

65 Ibid 5. See also Yiannis Papadakis, Nicos Peristianis and Gisela Welz (eds), *Divided Cyprus: Modernity, History and an Island in Conflict* (Indiana University Press 2006); and Yiannis Papadakis, *Echoes from the Dead Zone* (Tauris 2005).

heavily in the public discourse of Cyprus. As in so many places, rather more effort is devoted to (re)constructing 'the' past.[66]

Thinking about futures is difficult. Thinking about legal futures can be especially difficult when law is ostensibly being merely applied, for example, to resolve a contract dispute or criminal prosecution. Here law seems 'postfigurative' – that is, it relies on 'past-imagined realit[ies]' and 'operat[es] as if' those realities 'still endur[e]'.[67] But law can also be used to generate change. For example, Wilhelm Röpke 'insisted' in 1954 that the international economic order, like the law that supports it, was 'an "as if" economic order' which did not yet exist.[68] Law was cast as future-focused and prefigurative. So, thinking about futures, including econolegal futures, can afford a renewed sense of possibility. It can also afford a critical distance from 'the here and now', operating as a device to 'ask: *How can things be different?*'[69]

Authors, artists, futurologists and designers who specialise in thinking about possible futures often argue that it is only in speculating about futures that we become truly critical.[70] For them the future is neither 'a destination', nor a 'prediction'. Rather 'possible futures' are seen as 'a medium to aid imaginative thought' so that we can 'better understand the present' and 'discuss the kind of future [we] want ... and do not want'.[71] What distinguishes speculative designers from others who work with futures is their tendency to make imaginaries visible and tangible, focusing attention on the actual-potential.[72] Of

66 Recent years have seen attempts by civil society actors to co-construct island-wide understandings of pasts as multiple using school curricula: see Theopisti Stylianou-Lambert and Alexandra Bounia, *The Political Museum* (Routledge 2016); Charis Psaltis, Eleni Lytras and Stefania Costache, *History Educators in the Greek Cypriot and Turkish Cypriot Community of Cyprus: Perceptions, Beliefs and Practices* (Association for Historical Dialogue and Research/UNDP-Act 2011). See also the Nicosia Project, a digitised archival map of Nicosia that is enriched with time-specific multimedia annotations to emphasise the city's rich and multiple histories.

67 Davina Cooper, 'Towards an adventurous institutional politics: the prefigurative "as if" and the reposing of what's real' (2020) 68(5) Sociological Review 893, 911. For how designerly ways can be used to (re)construct pasts, see Perry-Kessaris (n 9 above) ch 4.

68 For example, see Annelise Riles, *Collateral Knowledge: Legal Reasoning in the Global Financial Markets* (University of Chicago Press 2011) 213.

69 Mazé (n 23 above) 37–38 and 48–49.

70 For example, Ruth Levitas understands 'utopia as method': *Utopia as Method: The Imaginary Reconstitution of Society* (Palgrave Macmillan 2013).

71 This vision is shared by, among others, futurologists, authors of speculative literature and drama and radical social scientists: Dunne and Raby (n 23 above) 3. See also Yoko Akama, Sarah Pink and Shanti Sumartojo, *Uncertainty and Possibility: New Approaches to Future Making in Design Anthropology* (Bloomsbury Academic Press 2018) 10–11.

72 Guy Julier and Lucy Kimbell, *Co-producing Social Futures through Design Research* (University of Brighton 2016).

particular interest in the present context are recent calls for speculative designers to direct their skills beyond asking 'what if', and to work in support of normative and practical attempts to prefiguratively behave 'as if'.[73] Private and civil society actors in Cyprus can also, and sometimes do, engage in such prefigurative design. For example, in 2011 the chambers of commerce collaborated to produce a news programme set in the year 2030 that asked what might the news look and sound like if Cyprus were united?[74] The remainder of this section explores one ambitious example of prefigurative design, the Hands-on Famagusta project, and speculates as to how such an approach might be applied to the exploration of econolegal futures.

Hands-on Famagusta was an architectural research and teaching project aimed at generating and supporting island-wide debates around the planning of common spaces in the northern city of Famagusta.[75] The project was doubly prefigurative – participants acted as if there were a common island-wide space for debate, although to many such a notion was and is impossible;[76] and as if there were a common Famagustian space to be planned, although it was and is fragmented and contested: violence in 1963 pressed Turkish Cypriots into the medieval city centre where they had historically been concentrated; and in 1974, as Greek Cypriots fled south, the cosmopolitan hotel-laden seafront suburb of Varosha was occupied sealed off by the Turkish army and left frozen in time – a 'ghost town' cut off from the rest of the city.

The project centred on three 'structures' to prompt and to facilitate debate. These were 'face-to-face roundtable workshops', an online 'interactive digital interface' and a 'physical transportable model of the city'. Each of these structures was designed to unsettle: specifically, to unsettle actual, presently entrenched positions around the factually and morally contested history of the city which made it difficult to debate the future; and to unsettle potential risks that the city might in future fall prey to the global tendency of private sector-led development to lead to permanent segregation or 'enclaving' of post-conflict cities.[77]

---

73 See Carl DiSalvo, 'Design and prefigurative politics' (2016) 8(1) Journal of Design Strategies 29.

74 CCCI/KKTO Cyprus Chambers of Commerce and Industry and Turkish Cypriot Chamber of Commerce, 'The Nine-O'Clock News in the Year 2030' (2011) Video.

75 Socrates Stratis (ed), *Guide to Common Urban Imaginaries in Contested Spaces* (Jovis 2016) 23.

76 Mariam Asad proposes prefigurative design as a way of securing better research relations and outcomes, especially in collaborative community-based research: 'Prefigurative design as a method for research justice' *Proceedings of the ACM on Human-Computer Interaction* vol 3. CSCW Article 41 (November 2019); and I have used model making to act 'as if' there already exists an environment conducive to researching island-wide economic life: Perry-Kessaris (n 9 above) ch 3.

77 Stratis (n 75 above) 23.

Underpinning all three 'structures' were a series of 'counter-mapping' strategies. Architects often seek to understand their fields of inquiry and practice by 'mapping' them – that is, analysing them in and through visualisations. By 'mapping controversies' they surface and work through the social, including economic, contexts of their designs; and by 'counter-mapping' they can reveal dominant framings and open them up to contestation and transformation.[78] The Hands-on Famagusta project first used specialist data collection techniques such as street level topographic and land use surveys to generate a conventional map of the city. This process revealed that Famagusta is segregated into multiple enclaves, distinguished by, for example, military use, the presence of cultural heritage or ecological sensitivity. Next, each enclave was represented in a 'visual matrix' collating maps, photos and text which were printed onto A2 paper. These served as the focal point of roundtable meetings of project members drawn from across the island. The top half of each matrix captured key 'existing' spatial, human and ecological conditions. During the round table meetings, the bottom half of each matrix was used to propose specific 'disenclaving strategies' – that is, planning devices which might '[tr]ansfor[m]' the 'edges' or 'dead limits' of existing enclaves 'into thresholds' across which all forms of social life might flow (Figure 1).[79]

These enclaves were then mapped in three-dimensional digital models – isometric drawings – which formed the basis of the interactive digital interface (Figure 2). In that interface, each enclave is depicted – mapped – as both suspended, unsettled, in space and, one senses, in time; and separated, divided, from the other by an exaggerated gap. In this way the interface communicates a utopic-dystopic quality that draws attention not only to what is actually-potentially at stake in planning, but more fundamentally to the very idea that something is at stake: all is not necessarily settled or fixed or stuck. This sense of provisionality and possibility is reinforced by the overlaying of a series of propositions arising out of the disenclaving strategies – for example, 'What if collective spaces in strategic locations' were introduced to 'connect the city and its citizens to the seafront?'; and by the invitation to members of the public to engage with and express opinions on those propositions by interacting with the interface.[80]

The third structure around which the project centred was a traditional, physical, architectural model of contemporary Famagusta

78 Ibid 38, 42 and 85. Nancy L Peluso coined the term 'counter-mapping' to capture how local communities can represent their own understandings of a location often in opposition to powerful outsiders: 'Whose Woods are These? Counter-Mapping Forest Territories in Kalimantan, Indonesia' (1995) 27(4) Antipode 383.

79 Stratis (n 75 above) 42 and 85.

80 Ibid 240.

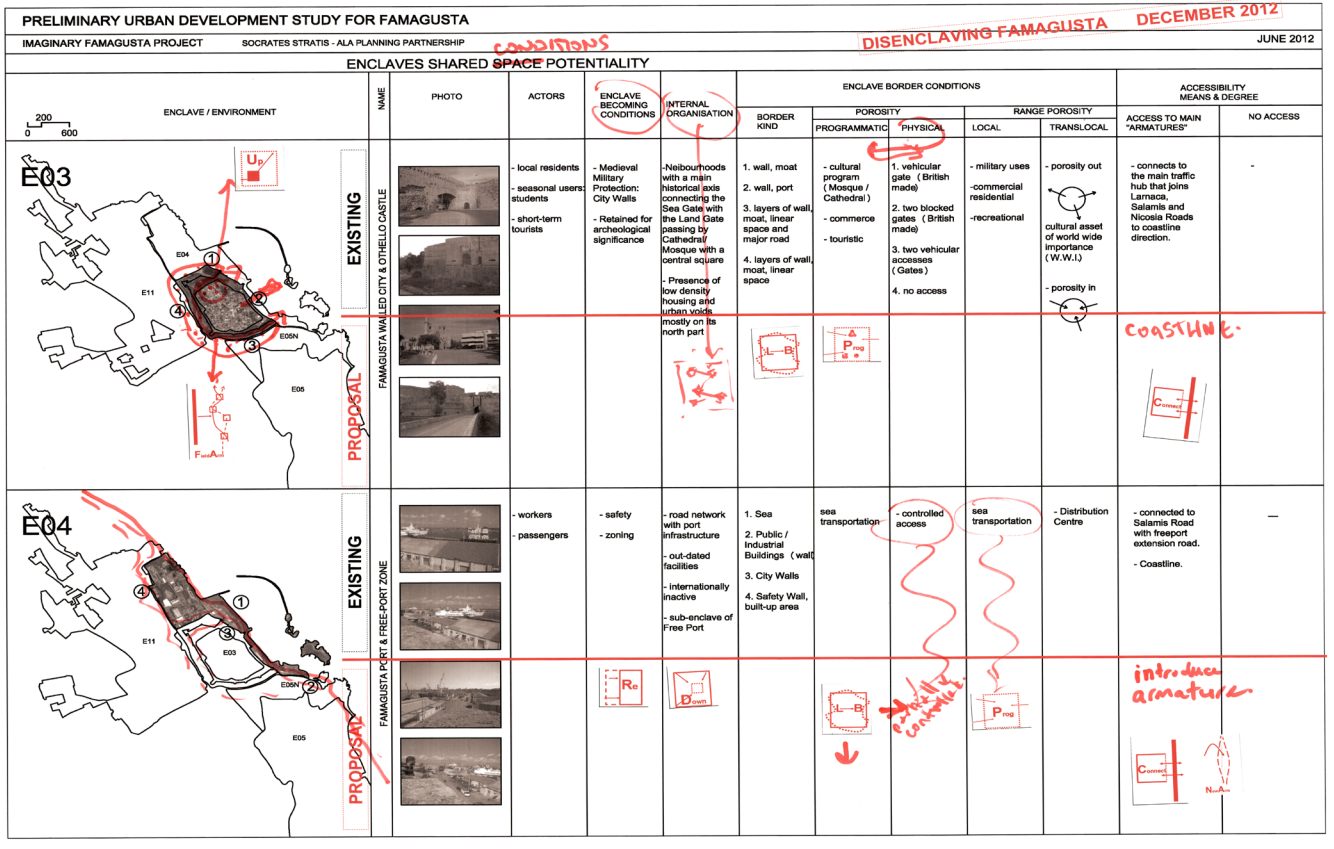

Figure 1: 'Scanned A2 visual matrices for unfolding matrices'. Image reprinted with permission from Socrates Stratis, 'Visual matrix for de-constructed enclaves' in Stratis (ed) (n 74 above) 90–91. Copyright Hands-on Famagusta, I.F., AA&U.

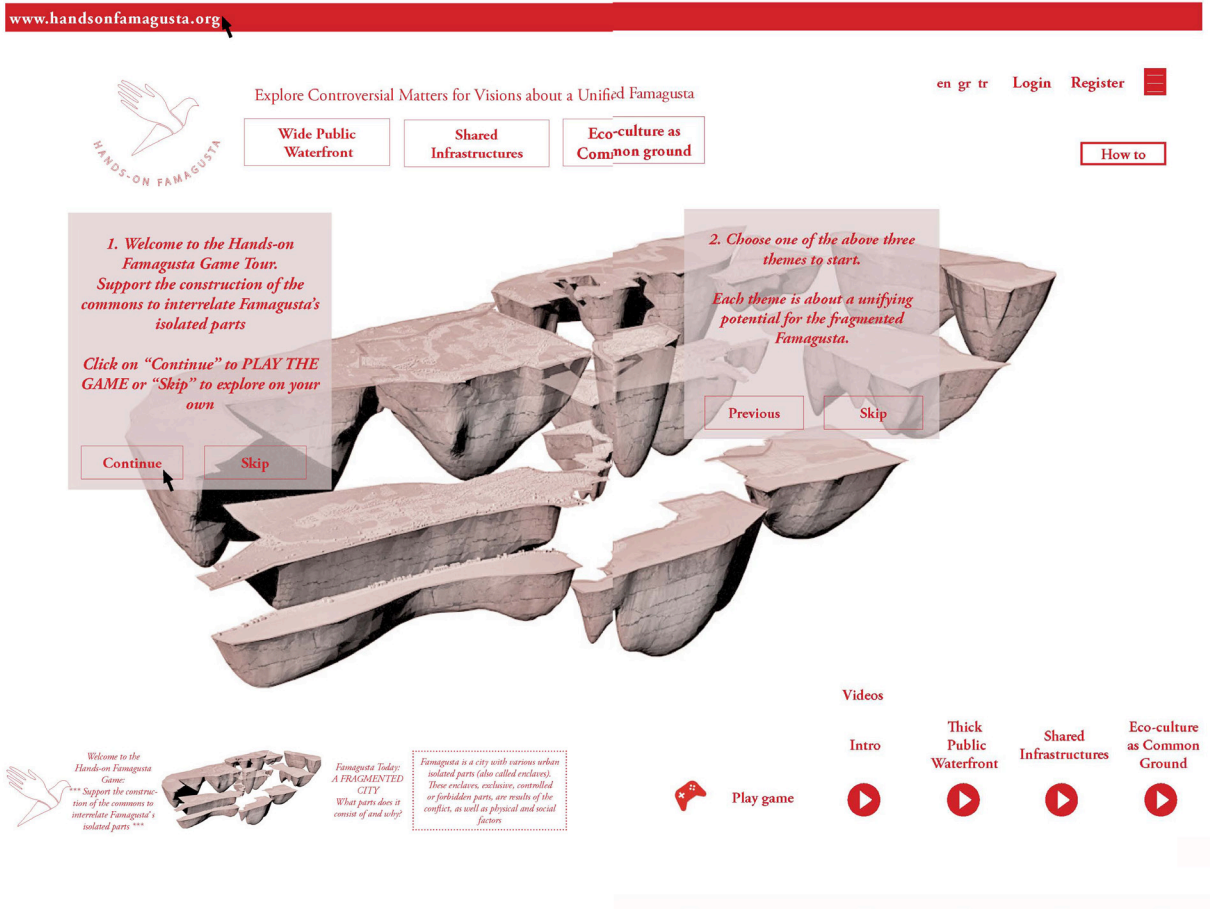

Figure 2: Hands-on Famagusta project interactive digital interface. Image reprinted with permission from Socrates Stratis, 'Architecture as urban practice in contested spaces' in Stratis (ed) (n 74 above) 46–47. Copyright Hands-on Famagusta, I.F., AA&U.

Figure 3: 'Famagusta city model exhibited in Ledras Street, Nicosia, Cyprus'. Image reprinted with permission from Socrates Stratis and Chrysanthe Constantinou (n 80 below), 142–143. Copyright Hands-on Famagusta, I.F

(Figure 3). The only other such model of any city on the island sits in Derynia, in the alternate, southern, municipality of Famagusta that was created by refugees in 1974. It represents the 'lost' northern city of Famagusta, frozen as it was in 1974, and it serves as a 'device of recollection'. By contrast, the purpose of the new, contemporary model was not to 'consolidat[e] existing power structures' through 'project[ion]' or 'remember[ance]', but rather to 'problematize' them through counter-mapping. In contrast to the digital interface, here the counter-mapping was achieved by accentuating coherence – a continuous luminous topography formed of 20 pieces of 55cm by 85cm card overlaid with pale 3D-printed urban blocks, accurate in all spatial respects – in which actual and potential multiplicity might be imagined. Like the digital interface, the physical model was designed as an 'interface for articulating arguments' in the public sphere; and it was made available for that purpose first in the dark calm of the Saints Paul and Peter Cathedral in the northern part of the island, then in the pedestrian bustle of Ledras Street on the southern side of the city centre of Nicosia, near a popular Green Line crossing point.[81]

81 Socrates Stratis and Chrysanthe Constantinou, 'Overwhelming presence of a city model' in Stratis (ed) (n 75 above).

This project exhibits all the core elements of a designerly approach specified at the beginning of this article. Each prefigurative component generated structured-yet-free spaces in which actualities and potentialities were made visible and tangible, and in which participants were prompted and facilitated to experiment with ideas in practical-critical-imaginative ways. In these enabling ecosystems participants made and communicated a sense of things; and engaged in meaningful relations with each other.[82] Furthermore, it was possible to complete in the absence of public leadership, but/therefore has not visibly impacted how public authorities are approaching the process of planning the future of Famagusta.[83] However, it is almost certain to have enhanced the willingness and ability of participants to engage in such debates in the future and can serve as inspiration for similar projects in different fields. So, it is reasonable to speculate: what if this process were adapted to the challenge of co-defining a common sense of public value and public purpose around law and island-wide economic life?

The process would begin with a mapping and counter-mapping of the context and controversies. The preceding sections of this article indicate some sources for such maps, including social attitudes surveys, interviews, legal texts and statistics content of a verbal or textual map. And those same sources indicate controversies around, for example, certification, respect, trust, dispute resolution, payments, certainty and information.[84]

How might those controversies be made visible and tangible? It would be necessary to identify key geographical locations such as clusters of economic, legal and related activity. It would also be necessary to include visual and material representations of abstract legal, economic and other social phenomena – that is, fundamentally abstract dimensions of the world, such as law, that we cannot directly see and must therefore always imagine, even when they do currently exist. For inspiration we can look back to 1927 when English Member

82 Stratis notes 'the emergence of a temporal community, part of a reconciliation strategy': Stratis (n 75 above) 40.

83 Indeed, the future of Famagusta was further complicated when Varosha was opened to visitors in 2020, attracting criticism from the UN Security Council: Statement by the President of the Security Council 9 October 2020 S/PRST/2020/9.

84 Interviews with Fiona Mullen, consultant economist (Nicosia 14 and 24 June 2016, and 19 June 2017); Costas Apostolides, consultant economist (Nicosia 14 May 2013); Alexandros Apostolides, academic and consultant economist (Nicosia 23 June 2016 and 19 June 2017); Izzet Adiloglu, Trade Development Specialist, KTTO (Nicosia 20 June 2017); Emine Çolak, barrister, adviser to KTTO and former Minister of Foreign Affairs (Nicosia 27 April 2018), Leonidas Paschalides, Director, Department of International and Public Relations, CCCI (Nicosia 23 April 2018), Burak Doluay, co-founder, CyprusInno (Nicosia 12 December 2018), Kemal Baykalli (n 36 above); Hasan Siber (n 60 above); Christos Christofi (n 59 above). See also Hatay et al (n 27 above) and Apostolides et al (n 43 above).

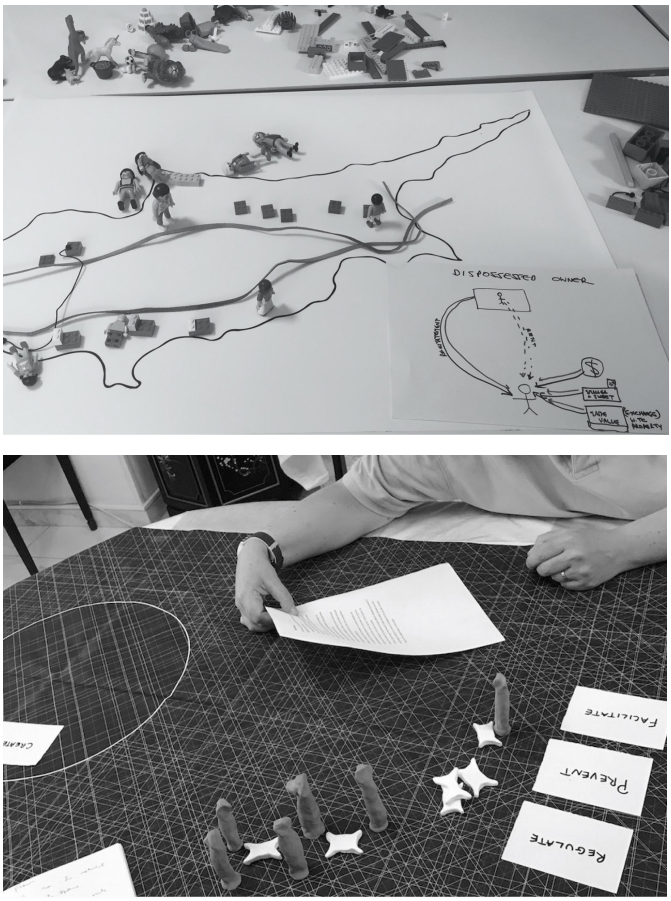

Figure 4: Modelling economic and legal phenomena with Fiona Mullen. Images: Amanda Perry-Kessaris.

of Parliament Clive Morrison-Bell reframed debates around trade law by making his argument visible and tangible. He 'commissioned a … carpenter to build a table-size map of Europe with miniature red brick walls' enclosing each country to a height determined by the tariffs it imposed on incoming goods. The message: break down these walls.[85] My own experimentation and interviews conducted with public, private and civil society actors in Cyprus indicates that it is possible individually and collaboratively to explore econolegal controversies using modular systems such as LEGO; found items, such as museum artefacts; or bespoke artefacts, such as clay figures (Figure 4).[86]

85 Slobodian (n 6) 37–42.

86 Perry-Kessaris (n 9) ch 3. For an example of diverse participants engaging in such co-modelling, see Amanda Perry-Kessaris and Joanna Perry, 'Enhancing participatory strategies with designerly ways for sociolegal impact: lessons from research aimed at making hate crime visible in Europe' (2020) 29(6) Social and Legal Studies 835.

The next step would be to generate speculative 'what if' scenarios, and to make them visible and tangible. Here, it would be necessary to represent not only those abstract ideas that already exist but also those potentially concrete, but not-as-yet existent dimensions of the world that must, for now, be imagined. Based on the interviews and surveys such as those cited above, we can anticipate that participants would want to ask, for example, what if crossing points were explicitly business-friendly, or what if there were a centre devoted to resolving island-wide economic disputes. These speculations would then be made visible and tangible in the kinds of experiential prototypes envisaged by Bason and others in and around IIPP – that is, full-scale mock-ups, complete with websites, personnel, furniture and forms. An example of how this might work is provided by *Four Legs Good*, a work by artist Jack Tan, which painstakingly conjured a compelling fictitious Animal Justice Court over three days in the old Victorian courtroom at Leeds Town Hall, within which legal professionals and members of the public were prompted and facilitated to behave 'as if' animals were already equal participants in the legal system.[87]

Finally, stakeholders and the wider public would be invited into these speculations, so that they might (inter)act, digitally and materially, as if island-wide econolegal systems were already present, and in the process come to understand what futures they want and do not want, as well as why.

What ecosystems already exist that might enable such prefigurative design practices? One possibility is Cyprus Dialogue Forum (CDF), which we can think of as working to generate an enabling ecosystem in which stakeholders can, among other things, act as if an integrated island-wide econolegal systems were already present. This independent, EU-funded, initiative is located in the Home For Cooperation in the buffer zone and aims to create a 'safe space' for political parties, trade unions, business and professional associations and non-governmental organisations from across the island to generate 'joint visions, options and consensus building instruments', and to develop 'common understandings and shared knowledge resources', in 'support' of 'change'.[88] Economic and legal issues thread through many items on the CDF 'agenda' for change which include, for example, 'economic and social cohesion convergences, synergies and sustainable economic

87 Jack Tan website. See further Perry-Kessaris (n 9 above) ch 4.

88 Cyprus Dialogue Forum website. Another possibility is CYENS, a multidisciplinary research centre in the south which includes a thinker-maker space and a museum lab. It not explicitly island-wide oriented, but does host 'The Ledra Palace Project' which explores the representation of 'elements of a past' that are 'contested and awkward', '[e]specially in countries dealing with social or political conflict, such as Cyprus'

development' and 'resolving practical/daily life challenges' posed by division.[89] Many aspects of CDF practices echo designerly ways. For example, CDF activities are guided by the Single Text of core values, structures and procedures that was co-produced by participants out of visualisations, such as diagrams and flow charts. These visualisations continue to act as the 'go-to language' for discussion and consensus building.[90] Furthermore, the co-defined CDF dialogue process consists of four stages which we can summarise as identify, define, generate and adopt, very similar to the iteratively convergent and divergent process of discover, define, develop, deliver that is characteristic of design. So, we can conceptualise the Single Text, and CDF meetings, as visible and tangible prototypes for integrated island-wide econolegal systems.

Another possible site for experiments in prefigurative design is CyprusInno. Formed in 2016 by Burak Doluay, a Turkish Cypriot living on the island, and Steven Stavrou who is of Greek Cypriot origin but lives abroad, CyprusInno aims to build 'an inclusive, island-wide ecosystem' for entrepreneurship, whether primarily commercial or social. So far they have 'mapped' the existing ecosystem and share the results in textual and visual form across the island; held a series of increasingly popular 'mixer' events in the buffer zone, bringing together entrepreneurial types from across the island to meet each other and to hear from experts in the economics and regulation of island-wide economic life; established a mentorship programme which matches entrepreneurs to mentors from the other side of the island; created an e-learning platform with six freely accessible modules on starting a business, including specific information on island-wide dimensions; and held a summer camp for would-be entrepreneurs in locations across the island. Most recently they have set up a network of accountants and lawyers willing to offer pro bono advice to those wishing to engage in island-wide economic life.[91] Many aspects of CyprusInno, like CDF, echo designerly ways. For example, we can conceptualise their databases, infographics and meetings as visible and tangible prototypes for integrated island-wide econolegal systems.

There is every reason to anticipate that both CyprusInno and CDF might become more designerly in their ways, and even better placed to prompt and facilitate prefigurative design practices, given the growing global prominence of design-based approaches, including in the EU's Green Deal. And it may well be that it is only by pursuing these more participatory and experimental methods that organisations such as CDF will be able to reach beyond the 'bubble' of 'like-minded', pro-

89 CDF Single Text.

90 Interviews with Maria Zeniou and Erbay Akansoy, *CDF Secretariate* (Nicosia 22 June 2016).

91 Interview with Burak Doluay (n 84 above); see further Cyprusinno.

reconciliation actors with whom they tend to engage and realise their full potential to make meaningful change.[92]

CONCLUSION

The people of Cyprus are well-placed, should they so choose, to combine their existing expertise in economic, legal and design prefiguration to begin to make alternative relationships between law and economic life more possible and probable. Ostensibly extreme or unique examples such as Cyprus are 'good for thinking'.[93] So such an enterprise might be expected to generate insights around the actual and potential contributions of law and design to the dynamics of mission-oriented thinking and action everywhere; as well as around how designerly ways might support the development of more socialised, less determinate, understandings of law and economic life more generally.

At the time of writing, there are increasing calls for the international community and the leaders of the north and the south to step aside and make way for citizen-led approaches to resolving the future of Cyprus. In the words of one of the most prominent of these groups, Unite Cyprus Now:

> As the UN knows and has itself stated, a genuine peace process requires the involvement of civil society, grassroots, women, youth, academia, educators and all segments of society … This is why [we have] been calling for Cypriots to own their destiny and to take their own initiatives to build bridges for a real peace process … Surveys have demonstrated, over and over again, that Cypriots are ready to unite their country and build a common future together. It is time to hand ownership to citizens.[94]

What if?

92 Statement by Andromachi Sophocleous, activist with Unite Cyprus Now (Email correspondence 22 May 2021).

93 Navaro-Yashin (n 64 above) 10–11.

94 Unite Cyprus Now, 'International Community should Stop Playing with our Lives' (Press Release 30 April 2021).

Northern Ireland
Legal Quarterly
Winter Vol. 72 No. 4 (2021) 651–681
Article DOI: 10.53386/nilq.v72i4.920

Putting behavioural economics in its place: the new realism of law, economics and psychology and its alternatives

Sabine Frerichs

Vienna University of Economics and Business
Correspondence email: sabine.frerichs@wu.ac.at

ABSTRACT

The behavioural turn in economics has spilled over into the field of law and economics. Some scholars even consider behavioural economics a variety of new legal realism, invoking earlier efforts to promote law as a behavioural and social science. In fact, behavioural economics works towards more realistic assumptions about human behaviour by drawing on empirical research methods, namely economic experiments. However, not all realisms are alike. Much of the mainstream of behavioural economics is inspired by cognitive psychology, which entails a move from behaviour to cognition and, ultimately, to brains. For scholars with a socio-legal background, legal realism rather points in the opposite direction: to the social contexts and institutional frameworks that shape individual behaviour. By exploring alternative options for a new realism at the intersection of law, economics, and related disciplines, this article exposes the relative neglect of institutions in behavioural economics and the tendency to reduce them to a corrective for cognitive biases in applications to law. At the same time, it provides a broad overview of different varieties of realism next to behavioural-economic ones.

Keywords: realism; law; behaviour; institutions; psychology; behavioural economics; law and neuroscience; institutional economics; socioeconomics; sociology.

INTRODUCTION: BEHAVIOURAL ECONOMICS AS NEW LEGAL REALISM

Behavioural economics is a fast-growing research field which aims to make economics more realistic. Instead of starting from a narrow understanding of 'economic man' as a fully-informed, self-interested, and entirely consistent utility maximiser, it aims to provide a psychologically more accurate account of economic decision-making. The change in perspectives has implications for law and public policy,

and the field of 'behavioural law and economics' is gaining increasing attention.[1]

Behavioural economics has been presented as a variety of 'new legal realism'.[2] Under this label Nourse and Shaffer lump together different types of scholarship – behavioural, contextual, and institutional – which share an 'opposition to neoclassical law and economics' theories of judging, its models of the individual and the state, and its approach to scholarship'.[3] By invoking legal realism, behavioural economics is linked with a scholarly tradition that moved the study of law towards the social sciences by turning to empirical research methods.[4] However, behavioural economics is not, in the first place, about greater realism in law, but about greater realism in economics. If there is a common denominator, it is a critique of legal and economic scholarship that prioritises formal models and abstract reasoning over an empirical engagement with complex social realities.

This article aims to put behavioural economics into perspective by demonstrating the range of possibilities to address questions at the intersection of law and economics in a realistic way. While there seems to be a strong tendency in contemporary scholarship to link law with economics, economics with psychology, and psychology with neuroscience, this is by no means the only option to bring legal realism up to date. Institutionalist approaches to law, economics, and society are no less empirical in orientation while they adequately contextualise human behaviour and, in some respects, seem to be more in line with the legal realist tradition.

The argument is structured as follows: the second section introduces behavioural economics, relates it to the neighbouring fields of experimental economics and neuroeconomics, and contrasts it with alternative approaches in institutional economics and socioeconomics. The third section revisits contributions and legacies of American legal realism, which promoted the study of law as empirical behaviour, and explains how behavioural research has changed over time and may cover

1 Cass R Sunstein (ed), *Behavioral Law and Economics* (Cambridge University Press 2000); Joshua C Teitelbaum and Kathryn Zeiler (eds), *Research Handbook on Behavioral Law and Economics* (Edward Elgar 2018); Eyal Zamir and Doron Teichman (eds), *Oxford Handbook of Behavioral Economics and the Law* (Oxford University Press 2014); Eyal Zamir and Doron Teichman, *Behavioral Law and Economics* (Oxford University Press 2018).

2 Daniel A Farber, 'Toward a new legal realism' (2001) 68 University of Chicago Law Review 279; Thomas J Miles and Cass R Sunstein, 'The new legal realism' (2008) 75 University of Chicago Law Review 831; Victoria Nourse and Gregory Shaffer, 'Varieties of new legal realism: can a new world order prompt a new legal theory?' (2009) 95 Cornell Law Review 61.

3 Nourse and Shaffer (n 2 above) 70.

4 Miles and Sunstein (n 2 above).

very different things. The fourth section outlines research perspectives in behavioural law and economics and juxtaposes them with other realist ways of doing law and economics, in particular institutionalist strands of scholarship. The fifth section focuses on the intersection of law and psychology and demonstrates the different directions that behavioural realism takes based on cognitive and social psychology and their interdisciplinary extensions. The concluding section sums up by putting behavioural economics in its place next to other forms of realism and namely more institutional approaches.

REALISM IN ECONOMICS: INTRODUCING BEHAVIOURAL AND INSTITUTIONAL APPROACHES

In behavioural economics, axiomatic assumptions about rational choice,[5] which are the cornerstone of neoclassical economics, are replaced with more realistic psychological assumptions derived from observable behaviour.[6] This 'psychological realism'[7] is key in selling behavioural economics to scholars and practitioners. Other interpretations of realism that are common in empirical social science are less prominent in behavioural economics. This selectivity is often not recognised in the field and rarely explicitly addressed. In principle, '[a]ssumptions can be of a psychological, sociological, or institutional type – it is not only psychology that is important to behavioral economics'.[8] In practice, the institutional dimension is relatively neglected in today's mainstream behavioural economics.[9] To demonstrate what different pathways a more realistic approach to economic behaviour and action can take, this section compares two lines of research: behavioural, experimental and neuroeconomics on the one hand and institutional economics and socioeconomics on the other.

5 Tom Burns and Ewa Roszkowska, 'Rational choice theory: toward a psychological, social, and material contextualization of human choice behavior' (2016) 6 Theoretical Economics Letters 195.

6 Colin F Camerer, 'Behavioural economics: reunifying psychology and economics' (1999) 96 Proceedings of the National Academy of Sciences of the United States of America 10575.

7 Colin F Camerer and George Loewenstein, 'Behavioral economics: past, present, future' in Colin F Camerer, George Loewenstein and Matthew Rabin (eds), *Advances in Behavioral Economics* (Princeton University Press 2004) 3; Matthew Rabin, 'An approach to incorporating psychology into economics' (2013) 103 American Economic Review 617, 617.

8 Morris Altman, 'Introduction' in Morris Altman (ed), *Handbook of Contemporary Behavioral Economics: Foundations and Developments* (Routledge 2015) xv.

9 Sabine Frerichs, 'What is the "social" in behavioural economics? The methodological underpinnings of governance by nudges' in Hans-W. Micklitz, Anne-Lise Sibony and Fabrizio Esposito (eds), *Research Methods in Consumer Law: A Handbook* (Edward Elgar 2018) 428.

Behavioural, experimental and neuroeconomics

Behavioural economics is best known for its criticism of neoclassical mainstream economics, whose assumptions about economic decision-making it considers empirically flawed and politically misleading. Whereas neoclassical economics starts from the analytical fiction of '*homo economicus*'[10] and takes rational choice as axiomatically given,[11] behavioural economics strives for a psychologically more accurate account of individual decision-making based on empirical research.[12] Rejecting a narrow understanding of rational 'economic man' as a perfectly informed, fully consistent and self-interested utility maximiser, behavioural economics promotes concepts of 'bounded rationality', 'bounded willpower', and 'bounded self-interest' instead, which would better capture how people really make decisions.[13] The change of labels – from 'perfect' to 'bounded' rationality – is also normatively relevant. Compared to neoclassical economics, behavioural economics has different policy implications.

Behavioural economics rests on empirical and, especially, experimental work, which provides the substrate for more 'realistic' models of economic decision-making than typically used in 'neoclassical practice',[14] where narrow understandings of rationality are still commonplace.[15] In terms of how the rationality principle is qualified, one can distinguish between two major strands: a cognitive strand and a social strand.[16] Whereas the cognitive strand seeks to substantiate cognitive biases and context effects in individual decision making, the social strand focuses on social or interdependent preferences in situations of strategic interaction.[17] The two strands differ in which (auxiliary) assumptions of a narrowly confined rational-choice model

10 Mary S Morgan, 'Economic man as model man: ideal types, idealization and caricatures' (2006) 28 Journal of the History of Economic Thought 1.

11 Milton Friedman, 'The methodology of positive economics' in Milton Friedman (ed), *Essays in Positive Economics* (Chicago University Press 1953).

12 Camerer (n 6 above).

13 Sendhil Mullainathan and Richard Thaler, 'Behavioral economics' in Neil S Smelser and Paul B Baltes (eds), International Encyclopedia of the Social & Behavioral Sciences (Pergamon Press 2001).

14 Sanjit S Dhami, *The Foundations of Behavioral Economic Analysis* (Oxford University Press 2016) 1.

15 Amartya Sen, 'Rational behaviour' in Macmillan Publishers (ed), *The New Palgrave Dictionary of Economics* vol 3 (Palgrave Macmillan 2018).

16 Luca Zarri, 'Behavioural economics has two "souls": do they depart from economic rationality?' (2010) 39 Journal of Socio-Economics 562.

17 Sabine Frerichs, 'Bounded sociality: behavioural economists' truncated understanding of the social and its implications for politics' (2019) 26 Journal of Economic Methodology 243.

they take issue with.[18] In the cognitive strand, this is a specification of the rationality principle in terms of correct beliefs about the world and consistent choice between available alternatives. In the social strand, this is the self-interest assumption, which is typically specified as an orientation towards one's own material benefits or payoffs, but is now extended to include social preferences and internalised social norms. Both strands are still oriented towards mainstream economics in that they aim to provide neoclassical models of utility maximisation with more realistic content. Even though the opposition of neoclassical and behavioural economics is usually in the limelight, many scholars actually argue for merging the two.[19]

Importantly, there are also alternative approaches to behavioural economics which do not share this orientation. This includes work focusing on an 'ecological', or contextualised, understanding of rationality, in which 'the norms for optimal behavior are empirically derived from the circumstances surrounding real world decision-making as opposed to being imposed exogenously without any connection to the empirics of decision-making'.[20] In other words, this strand of research distinguishes itself from mainstream behavioural economics in that it no longer uses the rational-choice framework as a reference for optimal decision-making behaviour, but acknowledges the adaptive quality of heuristics instead.[21] At the same time, these perspectives explicitly build on the classics of the field, or what is now occasionally referred to as 'old' behavioural economics, namely Herbert Simon's work.[22] Moreover, behavioural economics is not the only way to combine insights from economics and psychology. An obvious alternative is economic psychology which, despite increasing convergence between the fields, remains somewhat broader than behavioural economics and does not have to share the latter's concern with correcting neoclassical economic models.[23]

---

18 Clemens Kroneberg and Frank Kalter, 'Rational choice theory and empirical research: methodological and theoretical contributions in Europe' (2012) 38 Annual Review of Sociology 73.

19 Dhami (n 14 above).

20 Morris Altman, 'A Bounded rationality assessment of the new behavioral economics' in Roger Frantz et al (eds), *Routledge Handbook of Behavioral Economics* (Routledge 2017) 186.

21 Peter M Todd and Gerd Gigerenzer (eds), *Ecological Rationality: Intelligence in the World* (Oxford University Press 2012).

22 Erik Angner and George Loewenstein, 'Behavioral economics' in Uskali Mäki et al (eds), *Philosophy of Economics* (Elsevier 2012) 655–659.

23 Peter E Earl, 'Economics and psychology in the twenty-first century' (2005) 29 Cambridge Journal of Economics 909; Katharina Gangl and Erich Kirchler, 'Introduction' in Katharina Gangl and Erich Kirchler (eds), *A Research Agenda for Economic Psychology* (Edward Elgar 2019).

Behavioural economics overlaps with experimental economics, which prioritises experiments to study economic questions.[24] In behavioural economics, experiments are used to document behavioural patterns that deviate from (narrow) assumptions of rational choice. These 'behavioural experiments' can be distinguished from 'market experiments', which are more prominent in experimental economics.[25] Whereas behavioural economics is concerned with cognitive biases in individual decision-making and the 'rules of personal exchange' in pairs or small groups, experimental economics typically focuses on the 'rules of impersonal market exchange'.[26]

Neuroeconomics can either be understood as an extension of behavioural economics into the realm of neuroscience or as a subfield of behavioural and experimental economics.[27] The novelty is the utilisation of neuroscientific methods to study 'how the brain works in [economic] decision making'.[28] In practice, this means that behavioural phenomena of bounded rationality, bounded willpower, and bounded self-interest are tracked down to their neural correlates in the brain. The surge of neuroeconomics is linked with broader interdisciplinary ambitions. While behavioural economics already integrates economics with (parts of) psychology, neuroeconomics adds neuroscience as a third layer.[29] For some, this project promises not only to bring about 'some unification across the social sciences'[30] but to promote a 'fusion of the social and natural sciences'.[31]

In sum, behavioural, experimental, and neuroeconomics differ from neoclassical economics by adopting a more realistic approach to economic decision-making, which resorts to empirical research

---

24 George Loewenstein, 'Experimental economics from the vantage-point of behavioural economics' (1999) 109 Economic Journal F25.

25 Ana C Santos, 'Experimental economics' in John B Davis and D Wade Hands (eds), *The Elgar Companion to Recent Economic Methodology* (Edward Elgar 2011).

26 Vernon L Smith, 'Constructivist and ecological rationality in economics' (2003) 93 American Economic Review 465, 501.

27 Colin Camerer, 'Neuroeconomics: using neuroscience to make economic predictions' (2007) 117 Economic Journal C26, C26; Paul W Glimcher and Ernst Fehr, 'Introduction: a brief history of neuroeconomics' in Paul W Glimcher and Ernst Fehr (eds), *Neuroeconomics: Decision Making and the Brain* vol 2 (Elsevier 2014) xx; Martin Reuter and Christian Montag, 'Neuroeconomics – an introduction' in Martin Reuter and Christian Montag (eds), *Neuroeconomics* (Springer 2016).

28 Camerer (n 27 above) C38.

29 Reuter and Montag (n 27 above) 1.

30 Colin F Camerer, George Loewenstein and Drazen Prelez, 'Neuroeconomics: why economics needs brains' (2004) 106 Scandinavian Journal of Economics 555.

31 Paul W Glimcher, *Foundations of Neuroeconomic Analysis* (Oxford University Press 2011) xvi.

methods – typically experiments – to generate behavioural data and test economic assumptions. In addition, the experiments may include other psychological and physiological measurements which help to explain behavioural outcomes that are not in line with the predictions of neoclassical models.

Institutional economics and socioeconomics

While experimental and neuroeconomics were depicted as complements and extensions of behavioural economics, institutional economics and socioeconomics can better be understood as alternative approaches. Institutional economics comes in different variants, 'old' and 'new'. Old American institutionalism refers to a development in the economic discipline in the late nineteenth and early twentieth century before the neoclassical paradigm took hold.[32] This older tradition of institutional economics parallels historical-holistic scholarship on the European continent.[33] Contemporary versions of old institutionalism are sometimes referred to as 'modern institutionalism'.[34] In contrast, new institutional economics remains close to the twentieth-century economic mainstream. It is based on an 'adaptation' rather than a 'rejection' of standard neoclassical models.[35] In this regard, it can also be interpreted as 'new institutionalism within neoclassicism'.[36]

The approach to institutions differs in old and new institutional economics. At the risk of oversimplification, old institutionalism takes institutions as a starting point, highlights their pervasive influence on economic activities, and exposes their distributive effects, whereas new institutional economics takes individual interests as given, explains the emergence of institutions based on rational choice, and compares the efficiency of different institutional arrangements.[37] Both old and

32 William J Barber, 'American economics to 1900' in Warren J Samuels, Jeff E Biddle and John B Davis (eds), *A Companion to the History of Economic Thought* (Blackwell 2008).

33 Geoffrey M Hodgson, 'Institutional economic thought in Europe' in Geoffrey M Hodgson, Warren J Samuels and Marc R Tool (eds), *The Elgar Companion to Institutional and Evolutionary Economics* (Edward Elgar 1994).

34 Élodie Bertrand, 'Institutional economics' in Gilbert Faccarello and Heinz D Kurz (eds), *Handbook on the History of Economic Analysis, Volume III: Developments in Major Fields of Economics* (Edward Elgar 2016).

35 Victor Nee, 'The new institutionalisms in economics and sociology' in Neil J Smelser and Richard Swedberg (eds), *The Handbook of Economic Sociology* 2 edn (Princeton University Press 2005) 55.

36 Herbert Hovenkamp, 'Institutionalism, and the origins of law and economics' (2011) 86 Indiana Law Journal 499, 541.

37 Geoffrey M Hodgson, 'Institutionalism, "old" and "new"' in Geoffrey M Hodgson, Warren J Samuels and Marc R Tool (eds), *The Elgar Companion to Institutional and Evolutionary Economics* vol 1, A–K (Edward Elgar 1994); Geoffrey M Hodgson, 'The approach of institutional economics' (1998) 36 Journal of Economic Literature 166.

new institutional economics consider a broad range of institutions, including (formal) legal rules as well as (informal) social norms. However, the non-rational foundations of institutions, eg in 'instincts' and 'habits',[38] play a greater role in the tradition of old institutionalism than in new institutional economics. The different starting points notwithstanding, legal institutions gained attention in both schools of thought. In old institutionalism, law was credited with a central, if not constitutive role, for the economy, with distributive implications.[39] These ideas informed the 'first law and economics movement'.[40] In new institutional economics, matters of legal relevance include the allocation of property rights and the governance of contract relations.[41] In principle, what is known as law and economics today could also be subsumed under new institutional economics.[42] However, usually these are considered 'separate movements'.[43] Of particular interest in the present context are continuations of old institutionalism in institutional law and economics.[44]

Socioeconomics is a label for scholarship at the interface of economy and society.[45] Historically, the term 'social economics' was more common, and included contributions from economists as well as sociologists.[46] In the late twentieth century, socioeconomics

38 Hodgson, 'The approach of institutional economics' (n 37 above).

39 John R Commons, *Legal Foundations of Capitalism* (Macmillan Company 1924).

40 Herbert Hovenkamp, 'The first great law and economics movement' (1990) 42 Stanford Law Review 993.

41 Eirik G Furubotn and Rudolf Richter, *Institutions and Economic Theory: The Contribution of the New Institutional Economics* 2nd edn (University of Michigan Press 2010); Rinat Menyashev et al, 'New institutional economics: a state-of-the-art review for economic sociologists' (2011) 13 Economic Sociology – European Electronic Newsletter 12; Oliver E Williamson, 'The new institutional economics: taking stock, looking ahead' (2000) 38 Journal of Economic Literature 595.

42 Bertrand (n 34 above) 21-22.

43 Peter G Klein, 'New institutional economics' in Boudewijn Bouckaert and Gerrit De Geest (eds), *Encyclopedia of Law and Economics, volume I: The History and Methodology of Law and Economics* (Edward Elgar 2000) 459.

44 Steven G Medema, Nicholas Mercuro and Warren Samuels, 'Institutional law and economics' in Boudewijn Bouckaert and Gerrit De Geest (eds), *Encyclopedia of Law and Economics, volume I: The History and Methodology of Law and Economics* (Edward Elgar 2000).

45 Amitai Etzioni, 'Socio-economics' in Jens Beckert and Milan Zafirovski (eds), *International Encyclopedia of Economic Sociology* (Routledge 2006); Richard Hattwick, 'The future paradigm for socio-economics: three visions and a call for papers' (1999) 28 Journal of Socio-Economics 511; Simon Niklas Hellmich, 'What is socioeconomics?' (2017) 46 Forum for Social Economics 3.

46 Richard Swedberg, 'Economic sociology: past and present' (1987) 35 Current Sociology 1, 30; Milan Zafirovski, 'Sociological dimensions in classical/neoclassical economics: conceptions of social economics and economic sociology' (2014) 53 Social Science Information 76.

became institutionalised as an interdisciplinary research field next to behavioural economics, with both being opposed to the neoclassical mainstream.[47] As to the relation between behavioural economics and socioeconomics, the difference is more pronounced in the cognitive strand than in the social strand of behavioural economics. In the cognitive strand, behavioural economics lays emphasis on cognitive biases, that is, our limited capacities to rationally process and evaluate information. In contrast, socioeconomics understands rationality, first of all, as context-bound and highlights the social and cultural conditions of rational as well as non-rational action. In the social strand of behavioural economics as well as in socioeconomics, different forms of 'social rationality' play a greater role.[48] While behavioural economics largely draws on (cognitive and social) psychology, socioeconomics is more oriented toward sociology and other social science disciplines.

Given its link with sociology, socioeconomics is much interested in social institutions, which have from the outset been a central sociological concern.[49] New sociological institutionalism, which developed more recently, distinguishes 'three pillars of institutions': regulative, normative, and cognitive-cultural.[50] In new institutional economics, the third dimension has been relatively neglected so far, while it is manifest in (parts of) old institutional economics, in the form of 'habits of thought', or 'cognitive habits'.[51] Cultural-cognitive perspectives may help to bring institutional and behavioural economics closer to each other by exploring to what extent cognitive biases are shaped or reinforced by cultural influences. There is also work at the intersection of law and socioeconomics.[52] Like in explicitly institutionalist approaches, law is conceived as a social institution in structuring the economy and in shaping economic behaviour. This aspect is also emphasised in the economic sociology of law.[53]

47 Frerichs (n 9 above) 419–431.

48 Frerichs (n 17 above).

49 Nee (n 35 above) 55.

50 William Richard Scott, *Institutions and Organizations: Ideas, Interests, and Identities* (Sage 2013) 57–70.

51 Hodgson, 'The Approach of Institutional Economics' (n 37 above) 180.

52 Lynne L Dallas, 'Teaching law and socioeconomics' (2004) 41 San Diego Law Review 11; Robin Stryker, 'Mind the gap: law, institutional analysis and socioeconomics' (2003) 1 Socio-Economic Review 335; Mark D White, 'Securing an ethical foundation for law and social economics' in John B Davis and Wilfred Dolfsma (eds), *The Elgar Companion to Social Economics* 2nd edn (Edward Elgar 2015).

53 Diamond Ashiagbor, Prabha Kotiswaran and Amanda Perry-Kessaris (eds), 'Special Issue: Towards an Economic Sociology of Law' (2013) 40 Journal of Law and Society 1; Diamond Ashiagbor, Prabha Kotiswaran and Amanda Perry-Kessaris (eds), 'Special Issue: Continuing towards an Economic Sociology of Law' (2014) 65 Northern Ireland Legal Quarterly 259; Richard Swedberg, 'The case for an economic sociology of law' (2003) 32 Theory and Society 1

LAW AS BEHAVIOUR: LEGACIES OF LEGAL REALISM AND ITS BEHAVIOURAL UNDERPINNINGS

Legal realism, as it developed in the twentieth century, promoted an understanding of law as a behavioural and social science. In contrast to doctrinal legal scholarship, scholarship in the legal-realist tradition takes a behavioural approach to law. Behavioural law and economics is also referred to as behavioural analysis of law, or a behavioural approach to law and economics.[54] However, the similarities in terms are misleading. What is understood as a behavioural approach has changed over time and differs between disciplines and contexts. This problem also shows in the concept of 'behaviouralism', which is easily equated or confused with 'behaviourism'. Historically, behaviourism refers to a distinctive research paradigm based on stimulus-response models and concepts of classical conditioning that are used to explain human behaviour. This section explains how the behavioural approach to law was originally conceived and how different paradigms in the behavioural sciences yield different interpretations of legal realism.

American legal realism and the rise of law as social science

Behavioural research in law clearly pre-dates the emergence of behavioural law and economics. The development of a behavioural approach to law is connected with the rise of American legal realism and academic movements in its wake, which opened legal research to the social sciences.[55] This orientation towards empirical social research combined with a conception of law as an instrument of social engineering distinguished legal realism from earlier developments in historical and sociological jurisprudence.[56]

One of the forerunners of American legal realism at the turn of the twentieth century was Oliver Wendell Holmes, a legal scholar who served as justice at the United States Supreme Court. Holmes anticipated the legal realist credo that law is what judges do,[57] signifying a move away from logical principles to behavioural predictions of adjudication. This concerned legal as well as economic reasoning. Holmes criticised

54 Christine Jolls, Cass R Sunstein and Richard Thaler, 'A behavioral approach to law and economics' (1998) 50 Stanford Law Review 1471; Cass R Sunstein, 'Behavioral analysis of law' (1997) 64 University of Chicago law review 1175

55 Michiru Nagatsu and Magdalena Małecka, 'How behavioural research has informed consumer law: the many faces of behavioural research' in Hans-W Micklitz, Anne-Lise Sibony and Fabrizio Esposito (eds), *Research Methods in Consumer Law: A Handbook* (Edward Elgar 2018) 385–388.

56 Brian Tamanaha, 'Understanding legal realism' (2009) 87 Texas Law Review 731.

57 Oliver Wendell Holmes, 'The path of the law' (1897) 10 Harvard Law Review 457, 461.

conceptions of law as 'a given system ... [that] can be worked out like mathematics from some general axioms of conduct'.[58] He found the same style of 'downward reasoning'[59] in deciding cases based on economic theories or doctrines, which were shared by certain groups only and did not reflect the problems and challenges of the industrial age.[60] Instead, he envisioned a more empirical or inductive style of legal analysis and invoked 'the man of statistics and the master of economics' as 'the man of the future' who would help assess law's effects in social reality.[61]

Initially, the turn to economics was thus motivated by pragmatism, and not a belief in timeless economic models. Legal realists working in this vein can be depicted as 'Proto-Posnerian' in orientation.[62] This includes precursors of neoclassical law and economics as well as successors of 'old' institutional law and economics.[63]

From the perspective of the social sciences, the most important legacy of American legal realism is that it promoted an understanding of 'law as behaviour'.[64] This included the behaviour of legal officials as well as of laypersons.[65] At the centre were explanations of what judges do in the light of law's indeterminacy. One can distinguish between psychological accounts resorting to the personality of individual judges and sociological accounts addressing the behaviour of judges as a social group.[66]

A representative of psychological explanations was Jerome Frank, who emphasised the 'personal element' in judicial decision-making, which would make legal outcomes difficult to predict. As opposed to rule-based approaches he described judicial decision-making as 'the

58 Ibid 465.

59 G Edward White, 'From sociological jurisprudence to realism: Jurisprudence and social change in early twentieth-century America' (1972) 58 Virginia Law Review 999, 1003.

60 Holmes (n 57 above); Edmund Ursin, 'Clarifying the normative dimension of legal realism: the example of Holmes's *The Path of the Law*' (2012) 49 San Diego Law Review 487, 498.

61 Holmes (n 57 above) 469.

62 Brian Leiter, 'American legal realism' in Martin P Golding and William A Edmundson (eds), *The Blackwell Guide to the Philosophy of Law and Legal Theory* 2nd edn (Blackwell 2005) 58.

63 Herbert Hovenkamp, 'Knowledge about welfare: legal realism and the separation of law and economics' (2000) 84 Minnesota Law Review 805, 854–860.

64 Nourse and Shaffer (n 2 above)70

65 Karl N Llewellyn, 'A realistic jurisprudence: the next step' (1930) 30 Columbia Law Review 431.

66 Leiter (n 62 above).

Stimuli affecting the judge x *the Personality of the judge = Decisions*'.[67] As the terminology shows, this was also a response to cruder forms of behaviourism,[68] which leave out personality. In contrast, 'more modest and restrained' versions of behaviourism, which take account of the human mind, were exempted from this criticism.[69] The focus on understanding judicial decision-making in behavioural rather than in doctrinal terms is shared by sociological (or anthropological) approaches, representatives of which were Karl Lewellyn and Underhill Moore. This 'sociological wing' of legal realism[70] can more readily be recognised as giving 'realistic jurisprudence'[71] a social-scientific outlook, with the reference not being individual or idiosyncratic personalities but collective circumstances and culture.

One of the messages of legal realism was that the behaviour of judges could be studied in empirical terms just like that of any other human beings. This was a new perspective for legal scholars but could be considered a truism '[t]o a man of sociology or psychology'.[72] With the second law and economics movement, which was spearheaded by Posner's economic analysis of law, rational-choice models of judicial behaviour gained prominence as well.[73] Neoclassical law and economics forms part of the legal-realist heritage inasmuch as it continues the behavioural analysis of law by other means and shares an instrumentalist approach to law. However, it also claimed that '[t]he law and economics movement owes little to legal realism' given the latter's 'lack of method', or that the 'tools of economics [and] statistics' had not been sufficiently developed yet at that time.[74] Similarly, new institutional economics draws a link with legal realism but distances itself from the latter's perceived analytical and empirical deficiencies.[75]

---

67 Jerome Frank, 'Are judges human, part two: as through a class darkly' (1931) 80 University of Pennsylvania Law Review and American Law Register 233, 242, original emphasis.

68 Ibid 243–247.

69 Jerome Frank, *Courts on Trial: Myth and Reality in American Justice* (Princeton University Press 1973) 160, n 3.

70 Leiter (n 62 above).

71 Llewellyn (n 65 above).

72 Karl N Llewellyn, *The Common Law Tradition: Deciding Appeals* (Little, Brown & Company 1960) 53.

73 Richard A Posner, 'What do judges and justices maximize? (The same thing everybody else does)' (1993) 3 Supreme Court Economic Review 1.

74 Richard A Posner, *Overcoming Law* (Harvard University Press 1995) 3, 393.

75 Oliver E Williamson, 'Revisiting legal realism: the law, economics, and organization perspective' (1996) 5 Industrial and Corporate Change 383, 388.

Legal realism effectively opened law to empirical social science, even though there was no uniform position in this regard.[76] This includes economics and sociology as well as psychology, inasmuch as this takes social factors into account, and later political science, which developed a subfield of 'law and politics'.[77] From this point of view, law and economics is as much premised on legal realism as other 'law and' disciplines.[78] However, given its predilection for formal models and deductive reasoning, some scholars consider neoclassical law and economics not realistic enough to qualify as legal realism. For them, neoclassical law and economics simply exchanged the old formalism based on legal doctrine for a different formalism based on axiomatic economic concepts, which includes the superiority of market-like arrangements.[79]

This new formalism is overcome by behavioural economics. While this may be enough to consider behavioural economics a variety of new legal realism, it is not the only one. The concept can also be applied to other strands of scholarship at the intersection of economics and jurisprudence.

Behavioural science, behaviourism and the cognitive turn

However, it is not only that legal realism comes in different variants and differentiated over time, but there are also different versions of what is considered a behavioural approach. The behavioural turn in (law and) economics is hardly the first of its kind.

Behavioural science refers, in broadest terms, to the study of human and non-human behaviour. In the middle of the twentieth century, the behavioural sciences were understood to include 'sociology, anthropology, psychology, and the behavioural aspects of biology, economics, geography, law, psychiatry and political science'.[80] From the perspective of the social sciences, the most important addition is biology, or ethology – the science of animal behaviour. The line between behavioural and social sciences is contingent. In terms of 'leading discipline[s]' in the field, there was a shift from sociology to psychology.[81] Indeed, behavioural science often seems to be equated

76 John Henry Schlegel, *American Legal Realism and Empirical Social Science* (University of North Carolina Press 1995).

77 Miles and Sunstein (n 2 above) 832.

78 Marc Galanter and Mark Alan Edwards, 'Introduction: The Path of the Law Ands' (1997) 1997 Wisconsin Law Review 375.

79 David Campbell and Sol Picciotto, 'Exploring the interaction between law and economics: the limits of formalism' (1998) 18 Legal Studies 249; Nourse and Shaffer (n 2 above).

80 Nagatsu and Małecka (n 55 above) 368.

81 Ibid 388.

with psychology today, whereas sociology is regarded a social science *par excellence*. In general, a behavioural approach to law may draw on a variety of disciplines, including sociology, economics, and psychology.

Moreover, focusing on how psychology developed in the twentieth century, two alternative and largely successive paradigms have to be distinguished: 'behaviourism' and 'cognitivism'.[82] The behaviourist revolution sought to substitute mental states, which were considered merely subjective, with observable behaviours that could be objectively measured. In contrast, the cognitivist revolution brought the mind back in based on new methods and orienting metaphors (the computer), which set the focus on information processing. In the second half of the twentieth century, behavioural science increasingly came to be understood through the cognitive lens.[83] New subdisciplines and interdisciplinary research fields formed around the study of cognitive processes: cognitive psychology, cognitive science, and cognitive neuroscience. These perspectives can also be applied to the law.

As an empiricist research paradigm, behaviourism had an influence on both (old) economic institutionalism and American legal realism,[84] although in both cases other psychological approaches played a role as well. In old institutionalism, earlier representatives, such as Thorstein Veblen, were still influenced by instinct psychology,[85] whereas later representatives, including Walton Hamilton, came to be labelled as 'behaviorist institutionalists'.[86] In American legal realism, the shared interest was in showing how judges responded to the 'stimulus of the facts of the case, rather than to legal rules and reasons',[87] even though the relevant factors shaping their decision-making behaviour were specified differently by representatives of different wings.[88]

Moreover, behaviourism also left its traces in 'revealed preference

82 Ibid 365–367; João Paulo Watrin and Rosângela Darwich, 'On behaviorism in the cognitive revolution: myth and reactions' (2012) 16 Review of General Psychology 269.

83 Nagatsu and Małecka (n 55 above) 369.

84 Pier Francesco Asso and Luca Fiorito, 'Human nature and economic institutions: instinct psychology, behaviorism, and the development of American institutionalism' (2004) 26 Journal of the History of Economic Thought 445–464; Leiter (n 62 above) 50.

85 Asso and Fiorito (n 84 above) 447–449; Hodgson, 'The Approach of Institutional Economics' (n 37 above) 167.

86 Asso and Fiorito (n 84 above) 464.

87 Leiter (n 62 above) 52.

88 Jerome Frank, 'Are judges human? Part one: the effect on legal thinking of the assumption that judges behave like human beings' (1931) 80 University of Pennsylvania Law Review and American Law Register 17.

theory', based on which neoclassical economics came to equate observable behaviour with what was postulated as rational choice.[89] In political science, an inductive approach called behaviouralism, which starts from statistical behavioural observations, is noted to have its roots in behaviourism.[90] In law and economics, the term behaviouralism is used in contradistinction to behaviourism and not meant to be confused with the latter.[91] Indeed, behavioural economics is not behaviourist in orientation but was inspired by the mid-century's cognitive revolution, which brought about new scientific methods to study mental processes.[92] In other words, the behavioural turn that distinguishes behavioural economics from neoclassical economics replicates the cognitive turn in psychology.

REALIST THOUGHT IN LAW AND ECONOMICS: BEHAVIOURAL AND INSTITUTIONAL APPROACHES

Behavioural law and economics has become popular as a label,[93] but this can easily be misunderstood. If one does not take the formula of 'law and economics' as given, it suggests that a behavioural approach to law is complemented or combined with economic analysis. However, the opposite is the case: behavioural economics comes first, and law is added later. Preserving this idea, some scholars speak of 'behavioural economics and the law'.[94] The starting point in economics has implications for the notion of realism in the field, which reflects, in the first place, a greater realism in economics, and not in law and jurisprudence. This section illustrates how the behavioural turn in economics informs law and economics, focusing on the cognitive strand, and outlines alternative conceptions of law and economics with a realist pedigree, namely institutional approaches to law and economics as well as law and socioeconomics.

---

89 Hovenkamp (n 40 above) 1033; Don Ross, 'The economic agent: not human, but important' in Uskali Mäki and others (eds), *Philosophy of Economics* (Elsevier 2012) 695.

90 Inanna Hamati-Ataya, 'Behavioralism' in Renee Marlin-Bennet et al (eds), *Oxford Research Encyclopedia of International Studies* (Oxford University Press 2019); Colin Hay, Political Analysis (Palgrave Macmillan 2002) 10–12.

91 Jon D Hanson and Douglas A Kysar, 'Taking behavioralism seriously: a response to market manipulation' (2000) 6 Roger Williams University Law Review 259, 263–264, n 9; Gregory Mitchell, 'Taking behavioralism too seriously: the unwarranted pessimism of the new behavioral analysis of law' (2002) 43 William and Mary Law Review 1907, 1915, n 12.

92 Esther-Mirjam Sent, 'Behavioral economics: how psychology made its (limited) way back into economics' (2004) 36 History of Political Economy 735.

93 Sunstein (ed) (n 1 above).

94 Eyal Zamir and Doron Teichman (eds), *Oxford Handbook of Behavioral Economics and the Law* (Oxford University Press 2014).

Behavioural and experimental law and economics

The emergent field of behavioural law and economics challenges principles and assumptions of neoclassical law and economics, which is now sometimes referred to as traditional law and economics.[95] Relatedly, experimental economics finds extension in experimental law and economics.[96] A representative of neoclassical law and economics is Richard Posner, a high-ranking judge and legal scholar, who promoted the 'economic analysis of law'.[97] A figurehead of behavioural law and economics, or the 'behavioural analysis of law',[98] is Cass Sunstein, likewise an influential legal scholar. Together with Richard Thaler, a leading behavioural economist, Sunstein published *Nudge*, which promotes a vision of 'libertarian paternalism'.[99] The idea is to 'nudge' boundedly rational economic actors into taking decisions in their own best interest by (re)designing the ambient 'choice architecture'.[100] The appropriate cues would make people act 'as if' they were fully rational.[101]

Nudging is probably the most prominent application of behavioural economics relevant to law and policy-making.[102] It is rooted in the cognitive strand of behavioural economics, which is concerned with overcoming cognitive biases that may hamper individual decision-making and lead to suboptimal outcomes. With regard to law and economics, one can distinguish between two types of analysis: what the legal system actually does (positive analysis) and what it should do

95 Steven M Sheffrin, 'Behavioral law and economics is not just a refinement of law and economics' (2017) Œconomia History, Methodology, Philosophy 331.

96 Richard H McAdams, 'Experimental law and economics' in Boudewijn Bouckaert and Gerrit De Geest (eds), *Encyclopedia of Law and Economics, volume I: The History and Methodology of Law and Economics* (Edward Elgar 2000).

97 Ejan Mackaay, 'History of law and economics' in Boudewijn Bouckaert and Gerrit De Geest (eds), *Encyclopedia of Law and Economics, volume I: The History and Methodology of Law and Economics* (Edward Elgar 2000) 76–77; Richard A Posner, *Economic Analysis of Law* 7th edn (Wolters Kluwer Law & Business 2007).

98 Sunstein (n 54 above).

99 Cass R Sunstein and Richard H Thaler, 'Libertarian paternalism is not an oxymoron' (2003) University of Chicago Law Review 1159; Richard H Thaler and Cass R Sunstein, *Nudge: Improving Decisions about Health, Wealth, and Happiness* (Yale University Press 2008).

100 Thaler and Sunstein (n 99 above).

101 Frerichs (n 9 above) 437; Ana C Santos, 'Behavioural and experimental economics: are they really transforming economics?' (2011) 35 Cambridge journal of economics 705, 707.

102 Alberto Alemanno and Anne-Lise Sibony (eds), *Nudge and the Law: A European Perspective* (Hart Publishing 2015); Hans-W Micklitz, 'The politics of behavioural economics of law' in Hans-W Micklitz, Anne-Lise Sibony and Fabrizio Esposito (eds), *Research Methods in Consumer Law: A Handbook* (Edward Elgar 2018).

(normative analysis).[103] Both variants can also be found in behavioural law and economics. Positive analysis deals with 'how agents behave in response to legal rules and how legal rules are shaped'.[104] Normative analysis is about using law as a means to given (economic) ends but also about reconsidering 'the ends of the legal system' in light of bounded rationality, bounded willpower and bounded self-interest.[105]

'Governance by nudges' provides an alternative to how legal regulation is usually understood.[106] Legal frameworks inevitably work as a choice architecture that shapes individual preferences and influences economic decision-making.[107] A proposition of normative behavioural law and economics is to exploit the nudging potential of law to counteract bounded rationality by way of 'debiasing through law'.[108] However, because of the 'endogeneity' of law[109] in what may be regarded efficient regulation, there is no single social optimum to strive for. This ambiguity about the standard of comparison between two states, or types, of legal systems distinguishes the behavioural approach to law and economics[110] from its neoclassical counterpart. In alternative approaches to behavioural law and economics, which do not build on (adaptations of) the rational choice paradigm, this contingency would even play a greater role.[111]

Among the cognitive biases discussed in behavioural law and economics is the so-called 'endowment effect', which is studied in economic experiments.[112] The endowment effect describes a discrepancy in how much a person values a thing (or a right) depending on whether the person is 'endowed' with it or not. According to the assumptions of rational choice theory, the individual 'willingness to

103 Denis J Brion, 'Norms and values in law and economics' in Boudewijn Bouckaert and Gerrit De Geest (eds), *Encyclopedia of Law and Economics volume I: The History and Methodology of Law and Economics* (Edward Elgar 2000).

104 Jolls et al (n 54 above).

105 Ibid 1474.

106 Frerichs (n 9 above).

107 Sunstein (n 54 above) 1177.

108 Christine Jolls, 'Bounded rationality, behavioral economics, and the law' in Francesco Parisi (ed), *The Oxford Handbook of Law and Economics, volume 1: Methodology and Concepts* (Oxford University Press 2017); Christine Jolls and Cass R Sunstein, 'Debiasing through law' (2006) 35 Journal of Legal Studies 199.

109 Lauren B Edelman and Robin Stryker, 'A sociological approach to law and the economy' in Neil J Smelser and Richard Swedberg (eds), *The Handbook of Economic Sociology* 2nd edn (Princeton University Press 2005).

110 Jolls et al (n 54 above).

111 Gregory Mitchell, 'Alternative behavioral law and economics' in Eyal Zamir and Doron Teichman (eds), *Oxford Handbook of Behavioral Economics and the Law* (Oxford University Press 2014).

112 Keith M Ericson and Andreas Fuster, 'The endowment effect' (2014) 6 Annual Review of Economics 555.

pay' (purchasing price) and 'willingness to accept' (sales price) should not differ for the same item. The endowment effect is relevant to law and economics because it violates the Coase theorem, which has become a cornerstone of neoclassical thinking. Accordingly, in an ideal world without transaction costs, it would not matter how property rights are initially distributed because interested parties could always bargain for the most efficient outcome by exchanging goods and buying or selling entitlements. In behavioural law and economics, this formal assumption is countered with empirical findings suggesting that the endowment effect is widespread and may even amount to a universal law of behaviour.[113]

Besides the cognitive strand of behavioural law and economics, one can also identify a social strand, which seems somewhat less prominent though. Whereas the cognitive strand of behavioural economics focuses on individual cognitive biases, or 'bounded rationality', the social strand is concerned with 'bounded self-interest' and 'social rationality'. This distinction is also applicable to behavioural law and economics. As in behavioural economics in general, the cognitive and the social strand of behavioural law and economics both differ from the neoclassical tradition in law and economics, which is premised on rational choice and the pursuit of material self-interest.

Research in the social strand of behavioural economics takes social preferences as a starting point, with or without clarifying where these preferences come from. Social norms offer one powerful explanation, which also motivates research on law and prosocial behaviour.[114] The influence of social norms on individual behaviour gained attention from scholars working between law and economics and social psychology (or sociology, for that matter) in recent decades.[115] Social psychology here marks another pole of behavioural research next to cognitive psychology, both of which became articulated with behavioural economics. Indeed,

113 Gregory Klass and Kathryn Zeiler, 'Against endowment theory: experimental economics and legal scholarship' (2013) 61 UCLA Law Review 2, 26; Russell Korobkin, 'Wrestling with the endowment effect, or how to do law and economics without the Coase theorem' in Eyal Zamir and Doron Teichman (eds), *Oxford Handbook of Behavioral Economics and the Law* (Oxford University Press 2014).

114 Lynn Stout, 'Law and prosocial behavior' in Eyal Zamir and Doron Teichman (eds), *Oxford Handbook of Behavioral Economics and the Law* (Oxford University Press 2014).

115 Robert C Ellickson, 'Bringing culture and human frailty to rational actors: a critique of classical law and economics' (1989) 65 Chicago-Kent Law Review 23; Yuval Feldman and Robert J MacCoun, 'Some well-aged wines for the "new norms" bottles: Implications of social psychology for law and economics' in Francesco Parisi and Vernon Smith (eds), *The Law and Economics of Irrational Behavior* (University of Chicago Press 2005); Jeffrey J Rachlinski, 'The limits of social norms' (2000) 74 Chicago-Kent Law Review 1537.

what is referred to as 'social psychology and the law' or 'social psychology of law' today, often already includes developments at the interface of behavioural economics and law and economics.[116]

Institutional approaches to law and (socio)economics

Historically speaking, two waves of law and economics have to be distinguished,[117] which also differ in their relations to legal realism. The first wave was institutional law and economics, which is linked to old (American) institutionalism.[118] This school of thought was flourishing in the early twentieth century when legal realism emerged.[119] The second wave of neoclassical law and economics was based on the economic analysis of law. This only developed in the second half of the twentieth century after the heyday of 'old' legal realism. While institutional and neoclassical approaches thus mark different stages in the history of law and economics,[120] both are all also present in contemporary discourse.

Both schools of thought obviously share the idea that law is an 'essential institution' relevant to understanding the functioning and dynamics of modern economies.[121] However, they represent quite different ways of doing law and economics. Neoclassical law and economics is guided by formal models based on the assumptions of rational choice and methodological individualism and proceeds in a deductive manner. Institutional law and economics was from the outset more inductive in orientation and characterised by a pragmatic, historical and holistic approach.[122] This reflects the criticism of classical political economy by old institutional economists:

> Deductive reasoning in economics was held to be suspect: proper procedure called instead for direct empirical investigation of economic reality. Similarly, the notion that economic 'laws' could be identified – ones with universal validity throughout time and space – needed to be purged.[123]

---

116 Janice Nadler and Pam A Mueller, 'Social psychology and the law' in Francesco Parisi (ed), *Oxford Handbook of Law and Economics, volume 1: Methodology and Concepts* (Oxford University Press 2017); Kees van den Bos, 'Social psychology and law: basic principles in legal contexts' in Arie W Kruglanski, Paul A M Van Lange and E Tory Higgins (eds), *Social Psychology: Handbook of Basic Principles* 3rd edn (Guilford 2020).

117 Mackaay (n 97 above) 69–80.

118 Hovenkamp (n 40 above); Medema et al (n 44 above).

119 Commons (n 39 above); Karl N Llewellyn, 'The effect of legal institutions upon economics' (1925) 15 American Economic Review 665.

120 Mackaay (n 97 above).

121 Hovenkamp (n 36 above) 543.

122 Hovenkamp (n 40 above).

123 Barber (n 32 above) 239.

Furthermore, contemporary versions of institutional law and economics,[124] which form part of a 'dissenting tradition' in law and economics,[125] have to be distinguished from new institutional economics. The latter is more historical in orientation than neoclassical economics, but it still builds to considerable extent on the rational choice paradigm and takes the form of a 'rational-choice institutionalism'.[126]

Against this backdrop, behavioural law and economics can be understood as a third wave of law and economics, which differs from both institutional and neoclassical law and economics. Moreover, it also differs from the law and society movement, which developed parallel to the law and economics movement in the second half of the twentieth century and which some may consider the true heir of legal realism.[127] The two movements differed in their social-scientific orientation: in contrast to (the second wave of) law and economics, which builds on neoclassical economics and applies this framework to the law, the field of law and society is truly interdisciplinary in orientation, consisting in 'an amalgam of law, sociology, political science, anthropology and history, with lesser bits of economics and psychology'.[128] This is also to indicate that law and society scholarship does not exclude economic perspectives but considers them part of the overall enterprise.[129] There was even an interest in joining forces with 'descendants of ... institutional economics' at some point,[130] which resonates with earlier developments in (the first wave of) law and economics.[131]

Besides disciplinary composition, the law and society movement and the law and economics movement also differed in their political trajectories, which mirrors the respective roles of the two movements in defining the problems of the welfare state and offering adequate solutions:

> just as law and society helped to build and legitimate the activist state (and the role of law in its construction), the competing movement of

124 Medema et al (n 44 above).

125 Neil Duxbury, 'Is there a dissenting tradition in law and economics?' (1991) 54 Modern Law Review 300.

126 Peter A Hall and Rosemary C R Taylor, 'Political science and the three new institutionalisms' (1996) 44 Political studies 936, 936, n 1.

127 Bryant Garth and Joyce Sterling, 'From legal realism to law and society: reshaping law for the last stages of the social activist state' (1998) 32 Law and Society Review 409; Nourse and Shaffer (n 2 above) 115–127; G. Edward White, 'From realism to critical legal studies: a truncated intellectual history' (1986) 40 Southwestern Law Journal 819.

128 Galanter and Edwards (n 78 above) 379.

129 Lawrence M Friedman, 'Coming of age: law and society enters an exclusive club' (2005) 1 Annual Review of Law and Social Science 1, 8.

130 Garth and Sterling (n 127 above) 465, n 101.

131 Hovenkamp (n 40 above).

> law and economics provided much of the learning and legitimacy for the later turn away from social welfare and state activism.[132]

To put it differently, the economic analysis of law is more concerned with allocative efficiency than redistributive justice, and fares better in times of neoliberalism.[133] This can be compared with the 'politics of behavioural law and economics',[134] which seems to mark a new stage in the development of the welfare state, where state activism has, at least partly, been replaced by activation policies targeted at market citizens.[135] Whereas economic incentives may be enough for rational market participants, boundedly rational ones require 'nudges' to act in their own best interest. In short, behavioural economics yields behavioural politics, which is implemented using a new type of 'socio-cognitive prostheses'.[136] The choice architectures highlighted in this context can at least partly also be understood as cultural frameworks shaping decision-making.

Starting from a different end than law and society research, the interdisciplinary field of socioeconomics likewise offers alternative perspectives on the interrelations of law and the economy. Focusing on the intersection of economy and society, socioeconomics is similarly broad as law and society research in that it considers different dimensions (political, economic, legal, cultural) of this relationship. Moreover, what both fields of scholarship obviously share is that they consider legal or economic behaviour as 'embedded' in its social context.[137] Socioeconomics shares roots with behavioural economics in the critique of neoclassical economics and the aim to work towards greater realism in the analysis of economic phenomena. However, despite some (initial) overlaps in membership, behavioural economics and socioeconomics can better be understood as separate academic movements that crystallised around different institutional platforms.[138] Turning to the law, socioeconomics takes up questions

---

132 Garth and Sterling (n 127 above) 414.

133 Eric M Fink, 'Post-realism, or the jurisprudential logic of late capitalism: a socio-legal analysis of the rise and diffusion of law and economics' (2004) 55 Hastings Law Journal 931.

134 Micklitz (n 102).

135 Sabine Frerichs, 'From social rights to economic incentives? The moral (re)construction of welfare capitalism' in Toomas Kotkas and Kenneth Veitch (eds), *Social Rights in the Welfare State: Origins and Transformations* (Routledge 2017).

136 Koray Çalışkan and Michel Callon, 'Economization, part 1: shifting attention from the economy towards processes of economization' (2009) 38 Economy and Society 369.

137 Greta R Krippner and Anthony S Alvarez, 'Embeddedness and the intellectual projects of economic sociology' (2007) 33 Annual Review of Sociology 219.

138 Frerichs (n 9 above) 419–425.

at the intersection of law, society, and the economy where socio-legal research leaves off.[139] The same applies to the economic sociology of law, which combines perspectives from economic sociology and the sociology of law,[140] and is connected with both socio-legal and socio-economic research communities. In all these approaches, law is considered a key institution of modern economies, which obviously yields commonalities with institutionalist strands of (law and) economics.

What all this shows is that there are, indeed, different varieties of realism at the interface of economics and jurisprudence, and behavioural law and economics is by no means the only alternative to neoclassical law and economics. The request for greater realism can be responded to in different ways, which bring different layers of reality to the fore: individual behaviour or social institutions. From a legal point of view, these different approaches could tentatively be described as 'legal behaviouralism' on the one hand and 'legal institutionalism' on the other,[141] even though these concepts are hardly related to each other. The counterpart of both is non-realist scholarship.

LAW AND PSYCHOLOGY: DIVERGENT DIRECTIONS OF BEHAVIOURAL REALISM IN LAW

Behavioural economics is not the first behavioural approach to be applied to law, nor can law and behavioural science be narrowed down to behavioural law and economics. Even if one starts from a more restrictive understanding of behavioural research as focusing on psychology, there are also other ways psychological arguments may enter legal scholarship, and law can be enriched with behavioural insights without necessarily adopting an economic framework. For this broader undertaking, labels such as 'law and psychology' or 'law and behavioural science' can be used.[142] Another option is 'legal psychology'

139 Dallas (n 52 above).

140 Ashiagbor et al (eds) (2013) and (2014) (n 53 above).

141 Simon Deakin et al, 'Legal institutionalism: capitalism and the constitutive role of law' (2017) 45 Journal of Comparative Economics 188; Jon D Hanson and Douglas A Kysar, 'Taking behavioralism seriously: the problem of market manipulation' (1999) 74 New York University Law Review 630; David E Ingersoll, 'Karl Llewellyn, American legal realism, and contemporary legal behavioralism' (1966) 76 Ethics 253.

142 Anne-Lise Sibony and Alberto Alemanno, 'The emergence of behavioural policy-making: a European perspective' in Alberto Alemanno and Anne-Lise Sibony (eds), *Nudge and the Law: A European Perspective* (Hart Publishing 2015) 8–9.

defined as 'the scientific study of the effect of law on people; and the effect people have on the law'.[143]

Broadly speaking, law and psychology may interact in three different ways:[144] The most common understanding refers to the use of 'psychology *in* the law', where psychological expertise directly supports legal decision-making. This largely boils down to forensic psychology as 'the application of psychological knowledge for the purposes of the courts'.[145] 'Psychology *and* the law' is more encompassing as a label and includes psychological research on questions relevant to the operation of the judicial system without offering direct advice. Finally, 'psychology *of* the law' is understood as a 'more abstract approach' that aims 'to understand the way that law seeks to control behavior as well as how people react to and interact with the law'.[146]

Behavioural research at the intersection of law and economics is typically concerned with the latter type of questions, which also accounts for what type of psychology is imported into economic and legal scholarship. As it is occasionally argued, law makes assumptions about human nature and seeks to normatively guide behaviour. Psychology informs the law about how the regulation of behaviour works in practice and whether the law actually works as assumed.[147] In this perspective, the task of law and psychology is to instil the law with greater 'behavioural realism'.[148] In this section, two strands of law and psychology will be distinguished based on their starting points in cognitive and social psychology. The aim is to illustrate divergent pathways of realism in law, and different behavioural, or psychological, conceptions of legal and economic decision-making.

Increasing law's cognitive fit with evolved human brains

In behavioural (law and) economics, the new behavioural realism largely draws on cognitive psychology, which is premised on the cognitive

143 James R P Ogloff, 'Two steps forward and one step backward: the law and psychology movement(s) in the 20th century' (2000) 24 Law and Human Behavior 457, 467.

144 Curt R Bartol and Anne M Bartol, *Psychology and Law: Research and Practice* (Sage 2014) 5–10.

145 Ronald Blackburn, 'What *is* forensic psychology?' (1996) 1 Legal and Criminological Psychology 1, 4.

146 Bartol and Bartol (n 144 above) 9.

147 Tom R Tyler and John Jost, 'Psychology and the law: reconciling normative and descriptive accounts of social justice and system legitimacy' in E Tory Kruglanski and Arie W Higgins (eds), *Social Psychology: Handbook of Basic Principles* 2nd edn (Guilford Press 2007) 807–808; van den Bos (n 116 above) 513.

148 Victor D Quintanilla, 'Judicial mindsets: the social psychology of implicit theories and the law' (2012) 90 Nebraska Law Review 611, 613; Tyler and Jost (n 147 above) 808.

turn. The necessary boundary work took place in a research cluster at the interface of economics and psychology commonly referred to as 'behavioural decision research'.[149] Developing in the 1970s, scholars in this area aimed 'to identify the common set of cognitive skills, their benefits and limitations, and to explore how they help produce observable behavior, whether optimal or not'.[150] Given the cognitive foundations of behavioural decision research, one could also speak of 'cognitive' instead of 'behavioural' economics.[151] Taking behavioural decision research to law yields a specific, cognitivist understanding of 'legal decision theory'.[152]

What emerges is a new variety of legal realism that can best be illustrated by focusing at the bottom end: 'law and cognitive neuroscience'.[153] This is more often simply referred to as 'law and neuroscience' and sometimes abbreviated as 'neurolaw'.[154] The field is potentially very broad: it spans from the law of neuroscience (as a subject of regulation) to the neuroscience of law (as a professional practice), and can be complemented by a 'cognitive neuroscience of morality'.[155] The recent surge of law and neuroscience is driven by 'technological developments that allow noninvasive detection of brain activities',[156] so-called 'brain scanning' techniques. A good share of neurolaw is linked with forensic psychology and aims to explore what the cognitive turn implies for criminal justice. A theoretical question is

149 Nagatsu and Małecka (n 55 above) 397.

150 Angner and Loewenstein (n 22 above) 661.

151 Ibid 642; Luca Arnaudo, 'Cognitive law: an introduction' (2011) 19 Digest – National Italian American Bar Association Law Journal 1, 4; Salvatore Rizzello and Anna Spada, 'Behavioural and cognitive economics' in Faccarello Gilbert and Heinz D Kurz (eds), *Handbook on the History of Economic Analysis, volume III: Developments in Major Fields of Economics* (Edward Elgar 2016).

152 Gregory Mitchell, 'Why law and economics' perfect rationality should not be traded for behavioral law and economics' equal incompetence' (2002) 91 Georgetown Law Journal 67, 79–80.

153 Brent Garland and Paul W Glimcher, 'Cognitive neuroscience and the law' (2006) 16 Current Opinion in Neurobiology 130; Oliver R Goodenough and Micaela Tucker, 'Law and cognitive neuroscience' (2010) 6 Annual Review of Law and Social Science 61.

154 Francis X Shen, 'The law and neuroscience bibliography: navigating the emerging field of neurolaw' (2010) 38 International Journal of Legal Information 352.

155 Joshua D Greene, 'The cognitive neuroscience of moral judgment and decision making' in Michael S Gazzaniga and George R Mangun (eds), *The Cognitive Neurosciences* 5th edn (MIT Press 2014); Joshua D Greene and Jonathan D Cohen, 'For the law, neuroscience changes nothing and everything' (2004) 359 Philosophical Transactions of the Royal Society, Series B, Biological Sciences 1775.

156 Owen D Jones and Francis X Shen, 'Law and neuroscience in the United States' in Tade Matthias Spranger (ed), *International Neurolaw: A Comparative Analysis* (Springer 2012) 350.

whether conventional definitions of criminal responsibility (as well as of civil liability) still hold in the light of what neuroscientific evidence may tell about the mental state of defendants.[157] A practical question is under what conditions new types of evidence should be considered admissible in court proceedings.[158]

Of particular interest in the present context is how law and neuroscience intersects with law and economics in 'law and neuroeconomics'.[159] This emerging field of scholarship can be understood as an extension of behavioural and experimental law and economics into the realm of neuroscience. In line with the behavioural turn in law and economics, the aim is to redirect scholarship 'to a more realistic and less aprioristic approach to human behavior'[160] and, in doing so, to further something called 'cognitive law' or 'cognitive jurisprudence'.[161] The promise of this undertaking is to improve 'law's cognitive fit' for effectively 'govern[ing] behavior and structur[ing] society'.[162] This includes reckoning with bounded rationality, bounded willpower, and bounded self-interest, or different forms of social dynamics in small-group contexts or market settings, which are neglected in standard economic models. Cognitive biases are now understood as 'neurological limits to decision-making',[163] which have to be considered to create a law 'optimal' to influence economic and social behaviour in desired directions.[164]

Cognitive psychology and neuroscience offer 'proximate' explanations for behavioural phenomena by referring to cognitive mechanisms in the individual mind or brain. The guiding question is how these mechanisms work to produce certain behaviours. Evolutionary psychology goes one step further to find 'ultimate' explanations for certain mechanisms in the evolution of humankind.[165] More specifically, evolutionary

157 Owen D Jones et al, 'Law and neuroscience' (2013) 33 Journal of Neuroscience 17624, 17628; Francis X Shen, 'Law and neuroscience 2.0' (2016) 48 Arizona State Law Journal 1043, 1045–1049.

158 Garland and Glimcher (n 152 above); Shen 1063–1064.

159 Terrence Chorvat, Kevin McCabe and Vernon Smith, 'Law and neuroeconomics' (2005) 13 Supreme Court Economic Review 35.

160 Arnaudo (n 152 above) 10.

161 Ibid; Oliver R Goodenough and Gregory J Decker, 'Why do good people steal intellectual property?' in Michael Freeman and Oliver R Goodenough (eds), *Law, Mind and Brain* (Routledge 2009).

162 Goodenough and Tucker (n 13 above) 62.

163 Terence R Chorvat and Kevin A McCabe, 'Incentives, choices and strategic behavior: a neuroeconomic perspective for the law' in Joshua C Teitelbaum and Kathryn Zeiler (eds), *Research Handbook on Behavioral Law and Economics* (Edward Elgar 2018) 432.

164 Chorvat et al (n 159 above) 37.

165 Jaime C Confer et al, 'Evolutionary psychology: controversies, questions, prospects, and limitations' (2010) 65 American Psychologist 110, 111.

psychology refers to an interdisciplinary and integrative approach to the cognitive sciences,[166] which emphasises the 'environment of evolutionary adaptedness', that is, the prehistorical, or ancestral, environments in which the cognitive mechanisms of human beings originally evolved.[167] In this approach, the emphasis is on genetic evolution rather than gene-culture coevolution, and cognitive biases are interpreted in this light.[168] The overarching aim is the 'mapping of our universal human nature'[169] and not to study the effect of culture in shaping human evolution and development.

This scholarship shows proximity to behavioural and neuroeconomics,[170] but less so to institutional economics, despite some shared interests in the evolutionary foundations of human behaviour. In evolutionary psychology, human 'instincts' are raised to importance,[171] which resonates with the instinct psychology that inspired some old institutionalists a century ago. However, the latter were more interested in the interplay of instincts and institutions than in human instincts as such.[172]

By taking evolutionary perspectives on board, the research in law and neuroeconomics extends into a field of studies called 'law and evolution'[173] or 'evolutionary psychology and the law'.[174] Building on evolutionary psychology, the research objective is to find ultimate explanations for 'law-relevant behavior'[175] and to specify the 'legally relevant psychological [instincts and] intuitions'[176] that we share with our ancestors. Again, researchers in this field are not only interested

166 Leda Cosmides and John Tooby, 'Evolutionary psychology: new perspectives on cognition and motivation' (2013) 64 Annual review of psychology 201, 202.

167 David M G Lewis and others, 'Evolutionary psychology: a how-to guide' (2017) 72 American Psychologist 353, 362–363.

168 Johan J Bolhuis et al, 'Darwin in mind: new opportunities for evolutionary psychology' (2011) 9 PLoS Biology e1001109.

169 John Tooby and Leda Cosmides, 'The theoretical foundations of evolutionary psychology' in David M Buss (ed), *The Handbook of Evolutionary Psychology, volume 1: Foundation* 2nd edn (John Wiley & Sons 2016) 3.

170 Ibid 15.

171 Ibid 21–22.

172 Hodgson, 'The Approach of Institutional Economics' (n 37 above).

173 John Monahan, 'Could "law and evolution" be the next "law and economics"?' (2000) 8 Virginia Journal of Social Policy and the Law 123.

174 Owen D Jones, 'Evolutionary psychology and the law' in David M Buss (ed), *The Handbook of Evolutionary Psychology, volume 2: Integrations* 2nd edn (John Wiley & Sons 2016).

175 Russell Korobkin, 'A multi-disciplinary approach to legal scholarship: economics, behavioral economics, and evolutionary psychology' (2001) 41 Jurimetrics 319, 335.

176 Carlton J Patrick, 'The long-term promise of evolutionary psychology for the law' (2016) 48 Arizona State Law Journal 995, 1010.

in criminal law but also in aspects of economic law, including property law and contract law.[177] From the point of view of behavioural law and economics, evolutionary psychology provides the evolutionary underpinnings for what looks like bounded rationality, or cognitive biases, but may have been completely functional once upon a time.[178] Moreover, it is suggested that 'law's leverage', or relative effectiveness, in governing legally relevant behaviours ultimately reflects how well it matches the faculties of evolved human brains.[179]

Studying situated cognition in specific socio-legal contexts

According to a classical definition, social psychology aims to 'understand and explain how the thought, feeling and behavior of individuals are influenced by the actual, imagined or implied presence of others'.[180] This is a very broad definition, which lays more emphasis on the (socially embedded) individual than on the social in its own right.[181] In its application to law, social psychology leaves room for different approaches to modelling law as social behaviour, or 'social action'[182] and is especially not confined to norm-oriented or value-based action. However, there is a tradition in the social psychology of law, which precisely considers such intrinsic motivations to comply with the law as key in promoting a more realistic model of legal behaviour against the rationalistic assumptions of much of legal and economic thinking.[183] Whereas this approach seems to have a strong sociological pedigree, in recent times other types of scholarship have come to the fore, such as approaches combining experimental social psychology with empirical legal studies.[184]

This accounts for a certain overlap between social psychology and law on the one hand and behavioural law and economics on the other. Indeed, recent overviews of the social psychology of law tend to include certain aspects of behavioural and experimental economics, which is

177 Jones (n 174 above) 1197.

178 Ibid 1184–1185.

179 Owen D Jones, 'Time-shifted rationality and the law of law's leverage: behavioral economics meets behavioral biology' (2001) 95 Northwestern University Law Review 1141; Jones (n 174 above) 1186–1189.

180 Gordon W Allport, 'The historical background of social psychology' in Gardner Lindzey and Elliot Aronson (eds), *Handbook of Social Psychology* volume I 3rd edn (Random House 1985) 3.

181 Edwin E Gantt and Richard N Williams, 'Seeking social grounds for social psychology' (2002) 3 Theory and Science.

182 Max Weber, *Economy and Society: An Outline of Interpretive Sociology* (University of California Press 1978).

183 Tyler and Jost (n 147 above).

184 van den Bos (n 116 above) 527.

described as 'substantially informed by work in social psychology'.[185] In turn, increasing reference to behavioural realism in the social psychology of law seems, at least partly, inspired by encounters with behavioural economics and its application to law.[186] One can even find the idea that behavioural economics is 'one corner of social psychology',[187] albeit this rests on a rather broad definition of the latter, which then refers 'not only to the traditional field of research that goes by that name but also to a number of interrelated scholarly fields, including social cognition and cognitive neuroscience'.[188]

Analytically speaking, it makes sense to hold on to the distinction between cognitive and social psychology as alternative starting points, which resonates with the distinction of cognitive and social strands in behavioural economics. What was presented as an extension of (law and) cognitive psychology into (law and) cognitive neuroscience and evolutionary psychology reflects research interests in the cognitive strand of behavioural economics with its emphasis on bounded rationality and cognitive biases. In turn, insights from social psychology are particularly pertinent to the social strand of behavioural economics, which is concerned with bounded self-interest, or prosocial behaviour. This perspective has been applied to the law by analysing how legal rules interact with social norms and moral attitudes.[189] With the concept of social nudging, this approach fits well into the context of mainstream behavioural economics.

However, there is also research in the social psychology of law, which falls somewhat in between the cognitive and the social strand of behavioural (law and) economics. With regard to the cognitive strand, some scholars take issue with a prevailing concern with individual cognitive biases and their conception as '*exogenous* influences on individual behavior', as if they were not also subject to 'dynamic effects that multiple actors can exert upon each other within the decisionmaking context'.[190] Instead of individual decision-making under given social influences, social interaction here moves into the focus, or decision-making in social situations. In other words,

185 Nadler and Mueller (n 116 above) 125.

186 Quintanilla (n 148 above) 613–614, n 10; Tyler and Jost (n 147 above) 808.

187 Jon D Hanson, 'Ideology, psychology, and law' in Jon D Hanson (ed), *Ideology, Psychology, and Law* (Oxford University Press 2012) 11.

188 Adam Benforado and Jon D Hanson, 'Backlash: the reaction to mind sciences in legal academia' in Jon D Hanson (ed), *Ideology, Psychology, and Law* (Oxford University Press 2012) 503, n 1.

189 Kenworthey Bilz and Janice Nadler, 'Law, Moral Attitudes, and Behavioral Change' in Eyal Zamir and Doron Teichman (eds), *Oxford Handbook of Behavioral Economics and the Law* (Oxford University Press 2014); Stout, 'Law and Prosocial Behavior'.

190 Hanson and Kysar (n 141 above) 635, 639, original emphasis.

attention is drawn to the 'endogenous influence of other actors on the individual', which may also shape what cognitive biases prevail, or are exploited, in a specific situation.[191] Cognitive biases are then not only an independent variable but, at least partly, also a dependent one.

The concern with to what extent cognitive biases, or other types of individual preconceptions addressed in social psychology (eg 'implicit theories'), are susceptible to variable social influences leads some scholars to argue for a change of focus towards situated cognition and the social context of legal and economic decision-making.[192] This is supported by an understanding of social psychology which explicitly considers the 'individual *in the context of a social situation*' as its subject matter,[193] and thus goes beyond the more general but also more abstract approach of studying individual thought, feeling and behaviour as merely influenced by some sort of reference to others. Applying this to the law, the specific social, contextual and situational factors shaping individual decision-making would gain more analytical weight compared to (over)generalised accounts of cognitive biases, dispositions or mindsets as individual properties.[194] To some researchers, embracing the situational paradigm would be the logical next step in applying insights from social psychology in legal scholarship after the advances of behavioural law and economics.[195]

This research strategy would work against the previous and more reductionist one, which basically moves the level of analysis down from behaviours to brains. Moreover, a greater alertness to situational contexts will likely support giving greater weight to the intermediary effects of social institutions. Neither situations nor institutions can be captured in terms of neurobiological restrictions only, which are taken as given or as acquired in the course of human evolution. Instead, the social is preserved as an analytical category in its own right.

---

191 Jon D Hanson and Douglas A Kysar, 'Taking behavioralism seriously: some evidence of market manipulation' (1999) Harvard Law Review 1420, 1426, original emphasis.

192 Quintanilla (n 148 above) 613.

193 Ibid 614, original emphasis.

194 Mitchell (n 152 above) 72–73, 105–109.

195 Benforado and Hanson (n 188 above); Hanson (n 188 above).

CONCLUSION: BEHAVIOURAL REALISM VERSUS INSTITUTIONAL REALISM

If we are all legal realists now,[196] are we also all behavioural economists?[197] Clearly, behavioural economics is not the only heir of legal realism, and one can doubt that it is the most legitimate one. Behavioural law and economics may form part of the 'post-"law and economics" initiative' which scholars rooted in legal realism and law and society scholarship have hoped for,[198] but it has to be put into its place in the wider field of intersections between law and the social and behavioural sciences.

Scholars who consider behavioural economics a variety of a new legal realism argue that the different strands of scholarship covered by this label would share a focus on institutions and institutional analysis,[199] which brings the variability of institutional contexts to the fore and naturally suggests their formative influence on behaviour. This institutional focus would imply richer understandings of law, states, and markets than neoclassical law and economics has on offer, which starts from rather abstract ideals, as illustrated by the definition of private property and the Coase theorem. While it is true that behavioural economics is less axiomatic than neoclassical economics, it has also to be noted that there is a 'tendency to focus on one or two cognitive processes at the expense of institutional context',[200] which makes behavioural (law and) economics less institutionalist in orientation than many other approaches in the social sciences.

This article sought to shed light on this ambiguity by bringing out the contrast between the cognitive strand of behavioural economics, which represents the mainstream of this field, and institutionalist forms of scholarship, which have likewise been applied to questions at the interface of law and economics. By elaborating on opposite ends of the spectrum of the behavioural and social sciences, the intention was to demonstrate the range of possibilities of what realism can amount to, and how divergent realistic accounts of behaviour can be depending on which scientific paradigm or academic discipline one takes inspiration from.

For much of today's behavioural economics, the main inspiration is cognitive psychology. Extensions of law and behavioural economics into law and neuroscience illustrate how legal institutions are qualified

196 Nourse and Shaffer (n 2 above) 73.
197 Erik Angner, 'We're are all behavioral economists now' (2019) 26 Journal of Economic Methodology 195.
198 Garth and Sterling (n 127 above) 466.
199 Nourse and Shaffer (n 2 above) 112–113.
200 Farber (n 2 above) 299.

by their cognitive fit with human brains, which some consider efficient on their own but maladapted to the modern social world.[201] Arguably, this is a peculiar take on the human condition which many social scientists will not share. Moreover, it yields a vision of governing society which many new legal realists will not agree with. If the 'possibility (and difficulty) of positive political and legal action'[202] is reduced to manipulating cognitive biases, the legal realist project does not look 'revitalised'[203] but indeed quite exhausted. It is necessary to appreciate that there is a trade-off between behavioural and institutional realism and that different varieties of realism have different implications.

201 Jones (n 179 above).
202 Nourse and Shaffer (n 2 above) 63.
203 Ibid 90.

Northern Ireland
Legal Quarterly
Winter Vol. 72 No. 4 (2021) 682–712
Article DOI: 10.53386/nilq.v72i4.939

Evolutionary law and economics: theory and method

Simon Deakin

Christopher Markou

Centre for Business Research, University of Cambridge*
Correspondence emails: s.deakin@cbr.cam.ac.uk and cpm49@cam.ac.uk

ABSTRACT

The standard model of evolution in the economics of law, its important insights notwithstanding, lacks a good account of inheritance to go with analogues to variation and selection. The normative implication of the standard model, which is that self-organising and spontaneous orders will tend to efficiency, is also misplaced. Just as the association of evolution with progress, characteristic of the theory of legal evolution of a century ago, is now understood to be anachronistic, so it is time to discard outmoded notions linking judge-made law and common law legal reasoning with evolution to efficiency. Setting aside the unwarranted normative connotations of evolutionary models would release them to shape empirical research. Evolutionary theory informs methods, including leximetrics, time-series econometrics and machine learning, with the potential to throw light on the structural dynamics of legal change, and to resolve questions of law's coevolution with the economy which were raised but not resolved by the legal origins debate.

Keywords: evolutionary law and economics; legal evolution; game theory; systems theory; leximetrics; time series econometrics; machine learning; natural language processing.

* The authors are grateful to the Special Issue editors and referees for comments on an earlier draft, and for financial support from the ESRC through the Digital Futures at Work Research Centre (grant ES/S012532/1) and the UKRI-JST Joint Call on Artificial Intelligence and Society (grant ES/T006/315/1).

INTRODUCTION

The association of evolution with progress, which animated early attempts to apply Darwinian thinking to law, is no longer seen as tenable.[1] Its association with self-organisation[2] and spontaneous order,[3] on the other hand, continues to be influential. In contemporary law and economics, evolution is invoked to explain the pre-legal origins of social order.[4] It is a short step from there to the claim that the kinds of regulatory laws which are produced by the modern nation state are likely to be inefficient and distortionary.[5] A modified account would accept a role for law in ensuring societal coordination and cooperation, but distinguish between varieties of legal system according to their evolutionary content: hence judge-made law is to be preferred, on efficiency grounds, to statute;[6] private law is to be preferred to public law;[7] and, in the sense of legal origin, common law is to be preferred to civil law.[8] If it is hard to separate evolutionary theories of law from normative arguments about the content of legal rules, the field of legal evolution is perhaps little different in this respect from legal theory more generally, in which normative argument tends to be foregrounded. Finding an agreed basis for the study of law as a societal phenomenon remains an elusive project. Yet without such a grounding, the social scientific understanding of law cannot be expected to progress.

If, despite these difficulties, the idea of legal evolution is currently undergoing one of its periodic revivals, that is for good reason. It is not just in the physical and biological sciences but also in the social ones that evolutionary paradigms have been shown to have wide explanatory power. There has been an evolutionary turn in economics,

1 Peter Stein, *Legal Evolution: The Story of an Idea* (Cambridge University Press 1980) 124. Darwin himself seems to have thought that evolution was not purely progressive, writing: 'we are apt to look at progress as the normal rule in human society; but history refutes this': Charles Darwin, *The Descent of Man* vol I (Murray 1871) 166-167.

2 Niklas Luhmann, *Law as a Social System,* Klaus Ziegert (trans), Fatima Kastner, Richard Nobles, David Schiff and Rosamund Ziegert (eds) (Oxford University Press 2004).

3 F A Hayek, Law, *Legislation and Liberty: A New Statement of the Liberal Principles of Justice and Political Economy* (Routledge 1982).

4 Robert Ellickson, *Order without Law: How Neighbours Settle Disputes* (Harvard University Press 1994).

5 F A Hayek, The *Road to Serfdom* (Routledge & Kegan Paul 1945) and *The Constitution of Liberty* (University of Chicago Press 1959).

6 Paul Rubin, 'Why is the common law efficient?' (1977) 6 Journal of Legal Studies 51; George Priest, 'The common law process and the selection of efficient rules' (1977) 6 Journal of Legal Studies 65.

7 Hayek, *Law, Legislation and Liberty* (n 3 above).

8 Edward Glaeser and Andrei Shleifer, 'Legal origins' (2002) 117 Quarterly Journal of Economics 1193.

with evolutionary and epistemic approaches to game theory moving the field on from its mid-twentieth-century origins,[9] and a revival of interest in the role of institutions, including those of the legal system, in shaping long-run capitalist dynamics.[10] Meanwhile there is growing focus on the application to economic phenomena of theories of chaos and complexity, with their implications of self-reference and adaptation in the operation of markets and firms,[11] and a resurgence of interest in the discipline of cybernetics, which has assumed fresh relevance with the digitisation of social and economic life in all its various forms.[12] For these numerous reasons, it is timely to consider whether evolutionary concepts can help generate a descriptive or positive theory of law, of the kind which can aid understanding of its relationship to the economy.

This paper is intended as a step in that process. Section two below considers the standing and relevance of the mechanism, which for the sake of convenience can be referred to as the variation-selection-retention or 'VSR' algorithm, which lies at the core of the modern evolutionary synthesis in biology and is at the starting point of the extension of that synthesis to the social sciences.[13] The section will argue that, in order to make use of the VSR algorithm beyond biology, thought should be given to whether it represents a metaphor only, no matter how useful, for certain social and legal processes, or whether it can be regarded as having the somewhat different ontological status of being a constituent part of social, and legal, reality; a case will be made for the second of these two positions. The third section considers the implications of modelling based on the VSR algorithm for the empirical study of laws and legal systems in their economic context. Three sets of methods are considered: quantitative content analysis of legal texts ('leximetrics'); time series econometrics addressing the issue of causal inference; and the conjunction of machine learning with natural language processing which is opening up new possibilities for the analysis of legal texts. The final section concludes.

---

9 Masahiko Aoki, *Toward a Comparative Institutional Analysis* (MIT Press 2001) and *Corporations in Evolving Diversity* (Oxford University Press 2011); Herbert Gintis, *The Bounds of Reason: Game Theory and the Unification of the Behavioural Sciences* (Princeton University Press 2009).

10 Geoffrey M Hodgson, *Conceptualising Capitalism: Institutions, Evolution, Future* (Chicago University Press 2015); Simon Deakin, David Gindis, Geoffrey M. Hodgson, Keinan Huang and Katharina Pistor, 'Legal institutionalism: capitalism and the constitutive role of law' (2017) 45 Journal of Comparative Economics 188.

11 Benoît Mandelbrot and Richard Hudson, *The (Mis)behaviour of Markets: A Fractal View of Risk, Ruin and Reward* (Profile Books 2008).

12 Thomas Rid, *Rise of the Machines: A Cybernetic History* (Norton 2008).

13 On the definition of the VSR mechanism or algorithm and its use beyond biology, see Donald Campbell, 'Variation and selective retention in socio-cultural evolution' in Herbert Barringer, George Blanksten and Raymond Mack (eds), *Social Change in Developing Areas: A Reinterpretation of Evolutionary Theory* (Schenkman 1965).

EVOLUTION IN LAW: FROM METAPHOR TO REALITY

In his article surveying the field of evolutionary law and economics, Georg Van Wangenheim identifies two uses of the term 'evolution'.[14] The first is associated with what he terms, following Daniel Dennett, 'Universal Darwinism'.[15] This, he suggests, is 'grounded on drawing analogies to Darwinian biological evolution and its three core elements – variation, replication and selection'.[16] The body of literature he is referring to 'adapt[s] the models established in biology to problems in the economy or ... in the legal sphere', with

> some adherents of this strand of evolutionary economics [restricting] arguments admissible in evolutionary economics to models based on the variation, replication, and selection of 'memes', which in analogy to genes in biology carry the relevant information determining the fitness of their carriers, phenotypes in biology, which replicate and are selected.[17]

The other use of evolution in law and economics refers, he suggests, to contributions which are 'less exclusive in their definition of evolution', only requiring for a theory to be evolutionary 'that it tackles the emergence of some kind of novelty and its dissemination within some environment'.[18]

According to Van Wangenheim, the VSR algorithm 'is a powerful tool to develop new ideas on, and explanations of, social and economic

14 Georg Van Wangenheim, 'Evolutionary law and economics' in Francesco Parisi (ed), *The Oxford Handbook of Law and Economics Vol 1: Methodology and Concepts* (Oxford University Press 2017).

15 Daniel Dennett, *Darwin's Dangerous Idea: Evolution and the Meanings of Life* (Penguin 1995). The term 'generalised Darwinism' has also been used in this context: Geoffrey M Hodgson and Thorbjørn Knudsen, *Darwin's Conjecture: The Search for General Principles of Social and Economic Evolution* (University of Chicago Press 2010). Since generalised Darwinism is an important idea in the context of economics (Geoffrey M Hodgson, *Evolutionary Economics: Its Nature and Future* (Cambridge University Press 2009)), management studies (Howard E Aldrich, Geoffrey M Hodgson, David L Hull, Thorbjørn Knudsen, Joel Mokyr and Viktor J Vanberg, 'In defence of generalized Darwinism' (2008) 18 Journal of Evolutionary Economics 577; Dermot Breslin, 'Reviewing a generalized Darwinist approach to studying socio-economic change' (2011) 13 International Journal of Management Reviews 218), information theory (Eric D Beinhocker, 'Evolution as computation: integrating self-organization with generalized Darwinism' (2011) 7 Journal of Institutional Economics 393) and the theory of social ontology (Jan Willem Stoelhorst, 'The explanatory logic and ontological commitments of generalized Darwinism' (2008) 15 Journal of Economic Methodology 343), its neglect by law and economics scholars, as noted by Van Wangenheim (n 14 above), is all the more striking.

16 Van Wangenheim (n 14 above). What Van Wangenheim refers to as 'replication' can also be termed 'retention' or 'inheritance': see below, this section.

17 Ibid 162.

18 Ibid.

change, due to its very restrictiveness'; in other words, by virtue of its 'narrow frame', it 'forces the researcher to very clearly define: what varies, where variation comes from, how replication takes place, and which forces drive selection'.[19] However, Van Wangenheim's survey, published in 2017, found that 'within the literature sorting itself into [evolutionary law and economics], explicit Universal Darwinism only plays a minor role';[20] indeed, he cites only two papers, out of the more than one hundred in his survey, making use of it.

We may conclude from Van Wangenheim's article that the bulk of research in evolutionary law and economics actually makes little use of evolutionary concepts, preferring instead to see evolution as a synonym for 'change'. This is arguably a missed opportunity.[21] The issue is not whether evolutionary modelling and analysis can *only* proceed through the lens of the VSR algorithm; it is whether the full potential of the model for law and economics research is being realised.

Richard Dawkins has described evolution as the 'nonrandom survival of randomly varying coded information'.[22] This taut definition contains a number of elements. Variation or mutation in the most basic unit of evolution – in biology, the gene – is assumed by the definition to arise randomly, through copying 'errors'.[23] Whether or not mutation is entirely the result of error, it can be thought of as essentially stochastic.[24] The persistence or survival of particular genes, on the other hand, is neither random nor stochastic. Under conditions of scarcity, they are selected by reference to their fitness properties, or, more precisely, their implications for the fitness of their 'carriers' (plants or animals) in a given environment.[25] This process is 'blind'

19 Ibid.

20 Ibid.

21 It may also be an error, since change is only one aspect of evolutionary models; cf Richard Dawkins, *The Selfish Gene* 30th anniversary edn (Oxford University Press 2005) 12, referring to Darwinian selection as 'the survival of the stable'. It should be noted that, while Darwin was aware of the need for a mechanism of inheritance to complete his theory, he knew nothing of the concept of the gene, which came later; thus what is today thought of as the 'Darwinian' understanding of evolution is not exactly the same as Darwin's own.

22 Richard Dawkins, 'Man or God?' (*Wall Street Journal* 12 September 2001), written as part of a dialogue with the religious writer Karen Armstrong. Dawkins' theory of evolution is set out at greater length in *The Selfish Gene* (n 21 above), in particular chs 2–3.

23 Dawkins (n 21 above) 31–32.

24 G S Mani and B C Clarke, 'Mutational order: a major stochastic process in evolution' (1990) 240 Proceedings of the Royal Society B (Biological Science) 1297; R A Blythe and A J McKane, 'Stochastic models of evolution in genetics, ecology and linguistics' (2007) Journal of Statistical Mechanics: Theory and Experiment P07018.

25 Dawkins (n 21 above) 36.

rather than 'random';[26] it is structured, without being predetermined; but there is no teleology, and no convergence on an optimal end state.[27] The process is constrained in its outcomes, both externally and internally: by environmental conditions, including the degree of scarcity and the resulting degree of selective pressure, on the one hand;[28] and by the capacity of the gene to code the information needed to build the carrier (or more precisely, needed to instruct the proteins which build the plant or animal in question), on the other.[29]

Other elements of Dawkins' definition are notable. It is significant that he places such a high degree of emphasis on 'coded information' as the content of evolutionary units.[30] Evolution, in this view, requires the coding of information about the world into a form which permits its retention or inheritance over time.[31] This feature of evolution is underplayed in the law and economics literature, in favour of a focus on variation and selection. The Rubin–Priest model of legal 'evolution to

26 Richard Dawkins, *The Blind Watchmaker* (Oxford University Press 1986) 3, referring to 'natural selection, the blind, unconscious, automatic process which Darwin discovered' and which 'has no purpose in mind … no vision, no foresight, no sight at all'.

27 Dawkins refers to the result of evolution as 'complexity' (ibid 10) echoing Charles Darwin's observations on diversity in the final lines of *The Origin of Species* (Murray 1859), referring to 'these elaborately constructed forms, so different from each other, and dependent on each other in so complex a manner, [that] have all been produced by laws acting around us'. That neither complexity nor diversity imply teleology or optimality is emphasised by Uri Hasson, Samuel A Nastase and Ariel Goldstein, 'Direct fit to nature: an evolutionary perspective on biological and artificial neural networks' (2020) 105 Neuron 416, 424.

28 Dawkins (n 21 above) 36.

29 On genes informing the synthesis of proteins, see Richard Dawkins, *The Extended Phenotype: The Gene as the Unit of Selection* (Oxford University Press 1989). The level at which selection occurs in nature remains a highly contested issue in biology, and Dawkins's focus on the causative power of genes is by no means generally accepted. See George C Williams, *Adaptation and Natural Selection: A Critique of Some Current Evolutionary Thought* (Princeton University Press 1966); Benjamin Kerr and Peter Godfrey-Smith, 'Individualist and multi-level perspectives on selection in structured populations' (2002) 17 Biology and Philosophy 4; Pierrick Bourrat, 'From survivors to replicators: evolution by natural selection revisited' (2014) 29 Biology and Philosophy 4.

30 Cf Gérard Battail, 'Does information theory explain biological evolution?' (1997) 40 Europhysics Letters 343.

31 Richard Dawkins, 'Replicator selection and the extended phenotype' (1978) 47 Ethology 1; Richard Dawkins, 'Replicators and vehicles' (1982) King's College Sociobiology Group 45; Dawkins (n 29 above). The idea that genetic material is essentially a type of information continues to be the subject of much debate in biology: see, in particular, John Maynard Smith, 'The concept of information in biology' (2000) 56 Philosophy of Science 177; J A Winnie, 'Information and structure in molecular biology: comments on Maynard Smith' (2000) 56 Philosophy of Science 517.

efficiency' identifies litigation as a mechanism of selection which purges the law of inefficient (or wealth-destroying) rules. It is assumed that rules which have wealth-destroying effects are structurally more likely to be challenged in court, and so more likely to be selected out, leaving a residue of efficient (or wealth-maximising) rules.[32] The analysis has been widely credited with providing an explanation for the claim that the rules of private law in common law legal systems are consistent with allocative efficiency, and so promote economic growth.[33]

Mutation, in the Rubin–Priest account, is generated by what are assumed to be random variations in the way judges apply rules to the cases which come before them, as in the biological model. A process of variation plus selection, over sufficient iterations, is capable, it is argued, of generating rules which are optimally fitted to their environment, which are taken to mean Pareto-optimal or wealth maximising. However, it is only because the model omits to give systematic consideration to the role of inheritance or retention that it is able to predict evolution to efficiency; once account is taken of the need for some degree of continuity or inheritance in law, there is no guarantee that judge-made law will produce optimal results.[34] On the contrary, it is more plausible to believe that judge-made law will be characterised by 'frozen accidents', path dependencies and lock-in effects, of the kind associated with the non-teleological evolution which occurs in nature.[35]

---

32 See Rubin (n 6 above) 51; Priest (n 6 above) 68.

33 Van Wangenheim (n 14 above) 5–6. See also Ben Depoorter and Paul Rubin, 'Judge-made law and the common law process' in Francesco Parisi (ed), *The Oxford Handbook of Law and Economics volume 3: Public Law and Legal Institutions* (Oxford University Press 2017), noting qualifications and refinements of the original hypothesis in the later literature.

34 Simon Deakin, 'Evolution for our time: a theory of legal memetics' (2002) 55 Current Legal Problems 1.

35 Mark Roe, 'Chaos and evolution in law and economics' (1996) 109 Harvard Law Review 641. On path dependence more generally, see Paul A David (1985) 'Clio and the Economics of QWERTY' (75) American Economic Review (Papers and Proceedings) 332; Brian W Arthur, 'Competing Technologies, increasing returns, and lock-in by historical events' (1985) 99 Economic Journal 116; Douglass C North, *Institutions, Institutional Change and Economic Performance* (Cambridge University Press 1990). The idea of path dependence has much in common with the biological concepts of exaptation and punctuated equilibrium (on which see Stephen Jay Gould, *The Structure of Evolutionary Theory* (Belknap Press 2002)), discussed in a legal context by Deakin, 'Evolution for our time' (n 34 above). See also 'shifting balance theory' (SBT) which explains how populations caught in suboptimal peaks in adaptive landscapes can traverse across regions of low fitness (adaptive valleys) and subsequently higher fitness peaks: Sewall Wright, 'The roles of mutation, inbreeding, crossbreeding and selection in evolution' (1932) 1 Proceedings of the Sixth International Congress on Genetics 356. Roe ('Chaos and evolution' this note above) discusses the relevance of this idea for law.

Evolution in nature 'is a blind-fitting process by which organisms become adapted to their environment'.[36] It depends on over-production in order to generate a sufficiently high level of mutation to trigger selection. Variation takes multiple forms in addition to genetic mutation, including gene regulation and expression, and genetic drift. Inheritance via vertical transmission between parent and offspring is not a given but depends on the combinatorial power of the genetic code. Selection occurs via forces which include not just 'natural' or environmental selection, but artefactual external force, and sex, kin, and group preferences. It can result in hugely diverse and complex structures, but only over extended periods of time which are far longer than the durations that can be ascribed to human institutions.[37]

If this model has a certain validity in its application to social phenomena, it would imply a processual understanding of evolution as a dynamic process of adjustment, with multiple mechanisms in play, and no unique equilibrium in view. Evolution in nature appears to produce 'order from noise', but this is a misleading metaphor. Biological evolution occurs through recursive iterations between genes, phenotypes and environments; there is order in the genetic code and the phenotypes it generates, only because the external environment is also structured.[38] Thus the 'solutions' it produces are '*mistakenly* interpreted in terms of elegant design principles' (emphasis added); they are the result of 'the interdigitation of "mindless" optimisation processes and the structure of the world'.[39]

In so far as it is appropriate to speak of 'optimisation' of outcomes, the solutions arrived at are likely to be specific to local environmental niches, and so incapable of being scaled up or readily applied to other contexts. Evolution consists of 'ever-changing, blind, *local* processes by which species change over time to fit their shifting *local* environment' (emphasis added).[40] It is also backward-looking: it can only adjust to new observations by putting them in the context of past ones.

---

36 Hasson et al (n 27 above) 424.

37 Ibid, concluding that given the high error rate required for variation as well as the length of time needed for selection to take effect, evolution through blind variation, selection and retention is both 'costly and inefficient' as a mode of resource allocation.

38 While there may be a degree of randomness in genetic variation, the world as such is not random: 'it is structured according to laws of physics, biology, sociology, and the mind reflects this structure': Hasson et al (n 27 above) 426. For discussion of the similar idea of organism-environment interactions and context dependence in economics, see Sidney G Winter, 'Economic "natural selection" and the theory of the firm' (1964) 4 Yale Economic Essays 225.

39 Ibid 417.

40 Ibid.

This understanding of evolution may not predict 'evolution to efficiency'. However, bringing inheritance back into the model alongside variation and selection may actually be a good fit for what we know about the dynamics of legal change. Numerous studies of, and theorisations around, legal reasoning have pointed to inheritance-like mechanisms in legal language and decision-making, above all those associated with the way common law courts make use of the doctrine of precedent to combine 'at once stability and change' in the way they develop the law.[41]

Another reason for thinking about law in terms of the inheritance function of coded information is the bridge which can then build to systems theory, and the related fields of cybernetics and complexity theory. Niklas Luhmann's work is a fundamental point of reference in this respect, and it is here that we find developed the idea that legal concepts code information into a form, delimited and defined by juridical language, which permits their stabilisation or retention over time. Thus 'concepts are stored experiences taken from cases',[42] by virtue of which it becomes possible for 'distinctions [to] be stored and made available for a great number of decisions'.[43] Concepts 'compound information'[44] and operate as 'historical artefacts, auxiliary tools for the retrieving of past experiences'.[45]

It is through concepts, moreover, that 'the legal system has built up a highly sensitive reception and transmission station for economic news'.[46] While the separation of the economic and legal systems: 'prevents the automatic reception of the economic approach into the legal system (despite all the theories of "economic analysis of law")',[47] it is precisely the autonomy of law and its self-referentiality ('autopoiesis') that enables it to perform the function, essential for economic coordination, of stabilising expectations. In order for economic exchange to occur, 'law has to fulfil its own function, not that of the economy, effectively'; law 'must not belong to the type of goods or services that can be bought in the economic system, since 'otherwise there would be a vicious circle in the use of money, and the conditions which make money transactions possible would have

41 Karl Llewellyn, *The Bramble Bush* (Oceana 1930) 71.

42 Luhmann (n 2 above) 346. On the significance of the distinction between concepts and rules, with concepts characterised as hierarchically organised linguistic categories defined by varying degrees of abstraction, see Deakin, 'Evolution for our time' (n 34 above).

43 Luhmann (n 2 above) 340.

44 Ibid.

45 Ibid.

46 Ibid 390.

47 Ibid 400.

to be transacted and paid for in their own right'.[48] For transactions to occur in the economy, 'it must be possible to ascertain and, over the course of time, to remain able to ascertain, who the owner is before and after the transaction, and who is not'; through legal coding, the form which in the economy is called 'exchange' acquires 'a legal name, namely "contract"'.[49]

The idea that shared information or 'common knowledge' is at the root of societal coordination is also found in evolutionary and epistemic game theory. These branches of game theory model strategic interactions of boundedly rational agents in uncertain environments. The evolutionary strand points to the role of observation and learning in generating a basis for cooperation and coordination among inherently self-interested agents.[50] The epistemic strand points to the importance of beliefs in framing preferences, and of common knowledge or shared cognition in providing a basis for coordinated action.[51] The 'Bayesian' updating of beliefs in response to signals from the environment means that parties' preferences come to reflect the structure of their world.

An insight of this group of models is that rational behaviour, in itself, is incapable of generating stable outcomes; it is *common knowledge of rationality* which produces stable states, 'Nash equilibria', and this is

48 Ibid 391.

49 Ibid 393.

50 The origins of evolutionary game theory can be found in biology and may be traced back to R A Fisher, T*he Genetic Theory of Natural Selection* (Oxford University Press 1930) and later to John Maynard Smith, *Evolution and the Theory of Games* (Cambridge University Press 1982). Dawkins applies Maynard Smith's concept of the evolutionarily stable strategy to his theory of gene-centred evolution in *The Selfish Gene* (n 20 above) ch 5. The translation of these ideas into political science and economics since the 1980s can be seen in Robert Axelrod, *The Evolution of Cooperation* (Basic Books 1984); H Peyton Young, *Individual Strategy and Social Structure: An Evolutionary Theory* (Princeton University Press 1998); Aoki, *Toward a Comparative Institutional Analysis* and *Corporations in Evolving Diversity* (n 9 above); and Gintis, *The Bounds of Reason* (n 9 above). On the distinction between evolutionary and classical game theory, see Herbert Gintis, 'Classical versus evolutionary game theory' (2002) 7 Journal of Consciousness Studies 308, and for a recent overview of the field, J McKenzie Alexander, 'Evolutionary game theory' in Edward Zalta (ed), *The Stanford Encyclopedia of Philosophy* summer edn (Stanford University Press 2021).

51 The theory of epistemic games is derived initially from David Lewis, *Convention: A Philosophical Study* (Harvard University Press 1969) and then from the mathematical formalisations presented by Robert Aumann, 'Correlated equilibrium as an expression of Bayesian rationality' (1987) 55 Econometrica 1; 'Backward induction and common knowledge of rationality' (1995) 8 Games and Economic Behavior 6; and, with Adam Brandenberger, 'Epistemic conditions for Nash equilibrium' (1995) 63 Econometrica 1161. See, generally, Eric Pacuit and Olivier Roy, 'Epistemic foundations of game theory' in Zalta (ed) (n 50 above).

so regardless of whether the outcomes are welfare-maximising or in some way sub-optimal. According to this interpretation, the 'mutual defection' outcome in the one-shot or finitely played prisoner's dilemma game is not, as is sometimes supposed, the unique and inevitable outcome of each agent calculating that they are better off defecting than cooperating, whatever the other one decides.[52] This outcome only works where agents have a 'high degree of intersubjective belief consistency',[53] and there is nothing in static game theoretical models to guarantee this. Instead, the sub-optimal outcome of mutual defection is dependent on the knowledge, common to both parties, that defection is the expected strategy in the environment in which they find themselves. This explanation directs attention to the features of the environment which frame the parties' interactions, and to the mechanisms through which knowledge of those features comes to be widely shared. It is not possible then to speak of 'rationality' in exclusively psychological terms: rationality is situated and contextual, a reflection of the social environment.

A core concept here is that of a 'correlated equilibrium', first proposed in a formal model by Robert Aumann,[54] and subsequently developed into a theory of the cultural and institutional framing of cooperation by Herbert Gintis[55] and Masahiko Aoki.[56] A correlated equilibrium is a variant of an original Nash equilibrium, with the difference that each player chooses a best response to the other *assuming the other observes an event or instruction which informs their likely behaviour*. The 'event' is variously referred to as a 'choreographer' or 'correlating device'. Examples of correlated equilibria given by Gintis include the hawk–dove game played with the property strategy, which implies 'always play hawk if you are the incumbent, but not otherwise',[57] and the traffic intersection game with a convention, 'east–west goes first, north–south waits'.[58] Adapting the idea to a legal example, the

52 Aumann and Brandenberger (n 51 above).

53 Gintis, *The Bounds of Reason* (n 9 above) 41.

54 Aumann (n 51 above).

55 Gintis, *The Bounds of Reason* (n 9 above); see also his *Game Theory Evolving* (Princeton University Press 2009).

56 Aoki, *Toward a Comparative Institutional Analysis* and *Corporations in Evolving Diversity* (n 9 above) and (n 50 above); see also Masahiko Aoki, 'Endogenising Institutions and Institutional Change' (2007) 3 Journal of Institutional Economics 1; and 'Institutions as cognitive media between strategic interactions and individual beliefs' (2011) 79 Journal of Economic Behavior and Organization 20; and for an extension of Aoki's framework, Frank Hindrix and Francesco Guala, 'Institutions, rules and equilbiria: a unified theory' (2015) 11 Journal of Institutional Economics 459.

57 Gintis, *The Bounds of Reason* (n 9 above) 135.

58 Ibid 136.

'good faith game' can be understood as a correlated equilibrium of an original version of an offer and acceptance game played according to the rules of the 'battle of forms'. The addition of the correlating device – here, a legal rule which penalises opportunistic bargaining strategies – shifts outcomes from a sub-optimal Nash equilibrium involving mutual defection (in the battle of forms game, both parties seeking to impose their terms on the other in the hope that they will fire the 'last shot') to one of mutually beneficial cooperation (in the good faith game, bargaining to an outcome which maximises the joint contractual product).[59]

Consistently with the underlying methodology of epistemic and evolutionary games, the coordinating device is not simply posited, but is described in information-theoretic terms. Following the signal of the correlating device is a best response provided players have a given 'common prior'. More formally, a correlating device is an event [N] that specifies a particular environment [E] to all agents. With 'symmetric reasoning', all agents treat [N] as the basis for the belief that they are in a given environment [E]. An environment [E] can be said to be norm-governed if there is a norm [N(E)], which could be legal or social, specifying certain strategic behaviour [S]. If each agent is confident that other players associate [N] with [E], following [S] must be the common best response. Put another way, the correlating device or norm [N(E)] *is* the common knowledge on which agents draw to coordinate their actions.[60]

Gintis invokes the idea of culture to explain common knowledge: cooperation and coordination is possible because human societies contain 'cultural systems that provide natural occurrences that serve as symbolic cues for higher-order beliefs and expectations'. The parties' common priors 'are the product of common culture'. Thus it is not observation or experience alone which makes complex cooperation possible, but the existence of mechanisms of 'cultural transmission', which provide the means by which information can be retained and accessed.[61]

While Gintis says little about institutions in general or law in particular, Aoki builds on the idea of correlated equilibrium to construct a theory of public institutions, which include law. In his approach, an institution can be defined not so much as the rules of the game as the 'equilibrium outcome' of those rules; in game theoretical

59 Simon Deakin, 'Legal evolution: integrating economic and systemic approaches' (2011) 7 Review of Law and Economics 659.

60 Gintis, *The Bounds of Reason* (n 9 above) 138. See also Aoki, *Corporations in Evolving Diversity* (n 9 above) 127.

61 Gintis, *The Bounds of Reason* (n 9 above) 140-141; Aoki, *Corporations in Evolving Diversity* (n 9 above) 131.

terms, the play of a game, rather than the game form.[62] As he puts it, this view understands institutions as quasi-endogenous to their context: institutions 'may be identified with salient properties of recursive states of play such that every player takes them for granted and believes it beneficial to adapt to them'. Rules are therefore both 'systems of action' and 'shared cognitive categories'.[63]

Similarly to Luhmann, albeit from a wholly different (indeed, inverted) starting point,[64] Aoki arrives at the view that legal rules are defined by their cognitive content. Laws are 'equilibrium public indicators'[65] which convey to agents information on the environment that they are in and enable them to predict with confidence that all other agents know it. This makes it possible for agents to 'reason symmetrically', the condition for a correlated equilibrium. More precisely, he suggests, legal rules are 'summary representations of recursive states of play' in society. They embody knowledge about the past as well as directing behaviour: they 'can be regarded as representing something to be believed to prevail and to happen (and thus self-enforcing) from players' experiences'.[66] Law, then, is a form of 'historically accumulated common knowledge'.[67]

Combining game theory and systems theory therefore allows us to develop a more fully rounded account of legal evolution. The inheritance or retention function is performed by legal concepts, which code information from law's external context ('exchange', 'wrong') into juridical forms ('contract', 'tort') which the law can then process in its own terms.[68] Without some degree of distinctiveness to legal language,

---

62 Aoki, 'Endogenising institutions and institutional change' (n 56 above).

63 Aoki, *Corporations in Evolving Diversity* (n 9 above) 120.

64 Aoki adopts an approach rooted in the modelling of individuals' strategic behaviour, in contrast to Luhmann's social systems theory, in which the individual agent barely features as a unit of analysis. It should, however, be borne in mind that the game theoretical approach adopted by Aoki and Gintis marks a departure from methodological individualism, in seeking to understand rational action in its social context; on the need to move beyond an account in which institutions are seen as reducible to individual interactions, see Gintis, *The Bounds of Reason* (n 9 above), at 223: 'Complexity theory is needed because human society is a complex adaptive system with emergent properties that cannot now be, and perhaps never will be, fully explained starting with more basic units of analysis. The hypothetico-deductive methods of game theory and the rational actor model, and even gene-culture coevolutionary theory, must therefore be complemented by the work of behavioural scientists who deal with society in more macrolevel, interpretive terms.'

65 Aoki, *Corporations in Evolving Diversity* (n 9 above) 127.

66 Ibid 128.

67 Ibid 131.

68 Simon Deakin, 'Juridical ontology: the evolution of legal form' (2015) 40 Historisches Sozialforschung 170.

there is a limit to the effectiveness with which external information can be internally processed; thus the maintenance of a linguistic boundary between law and its economic or social context (of the kind represented in doctrinal terms by the distinction between 'law' and 'facts') is not an accidental feature of legal reasoning so much as its essential precondition.

The variation function is observable in the trial-and-error process through which legal rules are applied and tested to disputes and conflicts as they arise. It is not necessary to posit entirely random decision-making, and it is unrealistic to do so, given the way in which concepts enable learning from past experiences to be activated when addressing novel questions. The open-textured quality of legal language, and the contestability of legal interpretation in 'hard' cases, may be expected to generate a range of possible outcomes at the point where the law is called on to adjust to a new event in its environment.

The selection function can be observed in the litigation process which drives the development of case law, but can be present in the formulation of statutory rules, which are shaped by interest-group lobbying and collective deliberation. Any contrast between 'spontaneous' case law, on the one hand, and 'purposive' or 'directed' legislation, on the other, can only be a matter of degree.[69] The contestation of interests is present in both contexts, with repeat players able to exercise resources and power to their advantage unless checked by rules of procedure (for example, legal aid and conditional fees in the case of litigation, registration of interests and curbs on the commercialisation of political influence in the case of legislation). Just as there is more than one type of selection in nature, so it is possible to envisage multiple mechanisms in the social realm, which may alternatively substitute for or complement each other, depending on circumstances.[70]

This is an understanding of legal evolution, then, which stresses the cognitive content of the law and dynamic, processual and experimental character of legal change. The idea of evolution is not being used simply as metaphor; as Luhmann suggests, reference to the VSR algorithm in this context 'should not be taken as an argument by analogy but as a pointer to a general evolutionary theory, which can have many different applications'.[71] The model does not generate any *a priori* reason for

69 Simon Deakin, 'Law as evolution: evolution as social order' in Stephan Grundmann and Jan Thiessen (eds), *Recht und Sozialtheorie Im Rechtsvergleich* (Mohr-Siebeck 2015).

70 Deakin, 'Evolution for our time' (n 34 above) 38.

71 Luhmann (n 2 above) 231. If the use of the VSR algorithm in the context of the social sciences is seen this way, that is, as a specific application of a wider general theory of evolution, some of the problems in treating biological processes as *directly* informing social ones, as envisaged by sociobiology and evolutionary psychology, can be avoided: see Deakin, 'Evolution for our time' (n 34 above).

favouring judge-made law over statute, private law over public law, or the common law over the civil law. Nor does it offer us any reason for believing that the law tends inevitably to efficiency, however precisely that term is understood. What it does offer is a positive or descriptive theory which we can use to generate predictions or claims on the law–economy relation which are capable of being empirically tested. This is one in which the legal and economic systems are autonomous from, while at the same time endogenous to, each other: they co-evolve, mutually adjusting to each other's existence, in a way which denies any ontological priority of one over the other.

EVOLUTIONARY EMPIRICS: ISSUES OF MEASUREMENT AND INFERENCE

If law and the economy are understood as quasi-endogenous to each other's mode of operation, the precise nature of their relationship in any particular market setting (labour, financial, product or other markets, as the case may be) or historical period (industrialisation being not a continuous process but one characterised by phases and cycles of technological development) is left open to empirical inquiry. The feasibility of empirical study in this area is, however, conditioned upon the plausibility of the techniques involved. We will consider three sets of methodological issues concerning, respectively, 'leximetric' approaches to the measurement of legal phenomena; econometric approaches to statistical association and causal inference in the analysis of legal and economic data series; and the use of machine learning and natural language processing to study the long-run dynamics of legal and economic change.

Measuring legal phenomena: 'leximetrics'

The term 'leximetrics' has entered general use in empirical legal research over the past decade. It can be applied in a general sense to refer to all statistical uses of or approaches to law[72] or, somewhat more specifically and usefully for present purposes, to a method of generating machine-readable data concerning legal norms through content analysis of legal texts.[73] In this second and more precise sense, leximetrics involves the translation of textual material into

72 Robert Cooter and Thomas Ginsburg, 'Leximetrics: why the same laws are longer in some countries than others' U Illinois Law & Economics Research Paper No LE03-012.

73 Priya Lele and Mathias Siems, 'Shareholder protection: a leximetric approach' (2007) 7 Journal of Corporate Law Studies 17.

quantitative form as indicators and indices.[74] Because the method can be used to construct legal time series based on texts (cases and statutes) which are sequentially ordered, it can be put to use in testing claims about law's evolutionary properties and the dynamic nature of the law–economy relation. As with any other such method, however, its relevance is dependent in practice on there being a high degree of fit between the question which is addressed and the way in which the data being used to address it have been constructed.

Among the first attempts to develop indicators specific to law were those of international agencies, including the Organisation for Economic Co-operation and Development (OECD)[75] and the World Bank.[76] Perhaps because of their semi-official nature, they quickly gained a certain standing among researchers as well as policymakers. Over time the input of researchers has become more evident, and there has been a certain degree of cross-fertilisation between the university-based and agency-based modes of index production.[77] Indices have proliferated, as have econometric studies making use of them.[78]

Leximetric datasets are sometimes said to be 'synthetic',[79] but in this respect they are not fundamentally different from other data sources which are widely used in the social sciences. Growth studies use definitions of national income and output which ultimately rest on theories of how far trade is a synonym for wellbeing.[80] The statistical

74 Zoe Adams, Parisa Bastani, Louise Bishop and Simon Deakin, 'The CBR-LRI dataset: methods, properties and potential of leximetric coding of labour laws' (2017) 33 International Journal of Comparative Labour Law and Industrial Relations 59.

75 The OECD Employment Protection Indicators date back in their original form to the early 1990s. See David Grubb and William Wells, 'Employment regulations and patterns of work in EC countries' OECD Economic Studies Working Paper No 21 (1993), and for the latest version of the indicators, OECD Indicators of Employment Protection.

76 The World Bank's *Doing Business Reports* have published a number of indicators of the business environment since their first appearance in 2004. See now World Bank, Business Enabling Environment. In September 2021 the World Bank announced that it was discontinuing the Doing Business indicators because of concerns over 'data irregularities': 'World Bank to Discontinue Doing Business Report' (16 September 2021).

77 Thus, the World Bank financed some of the indices constructed by La Porta et al, and the International Labour Organization part-funded the Cambridge CBR-LRI index of labour regulation.

78 For a recent study containing an overview of the leximetric literature, see Jonathan Hardman, 'Articles of association in UK private companies: an empirical leximetric study' (2022) European Business Organization Law Review 517.

79 OECD and European Commission, *Handbook on Constructing Composite Indicators: Methodology and User Guide* (OECD 2008).

80 Diane Coyle, *GDP: A Brief but Affectionate History* (Princeton University Press 2015).

category 'unemployment' measures not the absence of 'work ' as such, but rather that of 'employment', an exchange relation of a particular kind with a distinct historical origin and lineage.[81] In all such cases, in order to interpret a given data series, it is relevant to examine the theoretical priors which went into its construction, and to consider how far those priors determine the form it takes.

An unavoidable prior in the construction of any dataset is that the data contained in it represent an external reality which would exist even if it were not being studied.[82] For some, this is a contentious step. Rejecting the possibility of 'objective empirical knowledge' in favour of a 'postmodern, constructivist social epistemology, according to which there is no "reality" to be discovered', this view holds that law should be seen as 'an epistemic subject that creates its own reality'.[83] A 'science of law' which purports to take legal phenomena as its object is similarly self-referential: 'science does not discover any outside facts: it produces facts'.[84]

Does leximetric method really create its object? There is no doubt that leximetrics creates leximetric data. Without leximetric techniques to make them, the *datasets* would not exist, and the 'facts' they contain are indeed constructs. However, it is a different matter to claim that the underlying *laws* would not exist but for the attempt to study them.

It is possible that, over time, through feedback effects, indices may influence the content of these laws. This is demonstrably the case with the indices developed by the World Bank, which were reported in 2008 to have influenced 'dozens' of law reform initiatives since the early 2000s.[85] Legal indices, as representations of the world, can influence that world, albeit with a lag. This type of reflexivity may well be a feature of all systems of representation. However, to say that representational systems operate in a relationship of feedback with their environment

81 Robert Salais, Bénédicte Reynaud and Nicolas Bavarez, *L'Invention du chômage* (Presses universitaires de France 1999).

82 Simon Deakin, 'The use of quantitative methods in labour law research: a defence and reformulation' (2018) 27 Social and Legal Studies 456.

83 Ioannis Kampourakis, 'Empiricism, constructivism and grand theory in sociological approaches to law' (2020) 21 German Law Journal 1411, 1416.

84 Ibid, quoting Gunther Teubner, 'How the law thinks: towards a constructivist epistemology of law' (1983) 23 Law and Society Review 727, 743.

85 Rafael La Porta, Florencio Lopez-de-Silanes and Andrei Shleifer, 'The economic consequences of legal origin' (2008) 46 Journal of Economic Literature 285, 325.

is one thing; to say that they create that environment *de novo* is a different thing.[86]

It is relevant to note that empirically minded social scientists engaged in the making of datasets expressly refer to the identification of a 'construct' as one of the first steps in this process,[87] and give the term 'construct validity'[88] to the process of ascertaining whether a particular construct is workable in its own terms. There need be no disagreement between 'realist' and 'hermeneutic' approaches on the active role played by the researcher in the creation of data. 'Data' do not exist in a natural state, and so are not simply observed; data are arrived at by processing observations according to categories which must pre-exist those observations, even if they are capable of being updated in response to them.

Where the disagreement comes is in the possibility of validation through the experimentalist methods of all empirically orientated science disciplines, including the social sciences: hypothesis identification, empirical observation, and provisional resolution of claims. If this is the founding dogma of empirical legal research, it no more arbitrary as a starting point than the converse proposition, seemingly associated with 'societal constitutionalism', that such a position is impossible.

Nor should it be thought that an empirically driven, social-scientific approach is incompatible with a systemic understanding of society, or with the methodology it implies. Science, as one social sub-system among many, observes other systems through its own discursive techniques. In doing so, science 'does not simply duplicate the view of the [system] it observes'; rather, 'the system being observed is covered over with a procedure of reproducing and increasing its complexity that is impossible for it' to achieve in its own terms.[89] Leximetric categories are no doubt among those 'conceptual abstractions that do

---

86 Thus, rather than saying that there is no social reality awaiting discovery, as opposed to multiple epistemes or cognitive frames of reference, it may be better to say that discursive systems such as law and science are part of the reality that they seek to represent, and with which they reflexively interact. Law does not entirely create its own reality, since its discursive categories reflect, if incompletely, the social referents to which they relate, and with which they may be expected to co-evolve: Simon Deakin and Frank Wilkinson, *The Law of the Labour Market: Industrialization, Employment, and Legal Evolution* (Oxford University Press 2005) 6, 14–17. On the claim that it is a 'fallacy' to conclude, from the existence of multiple forms of knowledge, that there is no single, invariant social reality to which they relate, see Roy Bhaskar, *A Realist Theory of Science* (Verso 1975).

87 Deakin, 'Quantitative methods in labour law research' (n 82 above) 461.

88 OECD and European Commission (n 75 above).

89 Niklas Luhmann, *Social Systems*, John Bednarz (trans and ed), 'Introduction' by Dirk Baecker (Stanford University Press 1995) 56.

not do justice to the observed system's concrete knowledge of its milieu or to its ongoing self-experience', but it is precisely 'on the basis of such reductions – and this is what justifies it – [that] more complexity becomes visible than is accessible to the observed system itself'. It is the 'technique of scientific observation and analysis, the functional method', which produces new knowledge, in so far as it 'allows its object to appear more complex than it is for itself'.[90]

Nor is it the case that the empirical study of law is ultimately reducible to 'the currents of logical empiricism and positivism in social sciences',[91] if those are taken to mean a research agenda which identifies social reality with directly observable and mathematically tractable event regularities. Leximetrics may be, in part, a quantitative research method, but its use alongside other methods, including qualitative data collection through interviews and field work, and historical archival research, far from being ruled out, is more likely to generate meaningful results than reliance on any one method.[92] Nor is a leximetric approach in itself incompatible with an understanding of social reality as layered or structured, of the kind associated with critical realist and social-ontological approaches to law.[93]

The association of empirical socio-legal research with positivism rests on the belief that there exists a deep 'epistemological divide between socio-legal studies and societal constitutionalism' which 'corresponds to the epistemological and ontological divide between positivism, empiricism, and rationalism on the one hand, and constructivism on the other hand'. That there is such a divide is one of the few areas of common ground between positivists and interpretivists, who insist not just on the unique correctness of their own respective positions, but on the impossibility of transcending their limits. The result is the all-too-familiar division of the social sciences into competing and mutually incompatible sub-disciplines, a result which may be regarded favourably as a contribution to pluralism or, less so, as a contribution to the fragmentation, verging on disintegration, of the social sciences, a process which incidentally leaves little space for any social scientific approach to law to flourish and encourages those who are sceptical of what it can achieve.

---

90 Ibid.

91 Kampourakis (n 83 above) 1416.

92 John Buchanan, Dominic Chai and Simon Deakin, 'Empirical analysis of legal institutions and institutional change: multiple-methods approaches and their application to corporate governance research' (2014) 10 Journal of Institutional Economics 1.

93 Simon Deakin, 'Tony Lawson's theory of the corporation: towards a social ontology of law' (2017) 41 Cambridge Journal of Economics 1505.

The techniques of construct validity which are applied in leximetric data coding, which have their origin in psychology, demonstrate how, in the practical context of empirical social science research, the division between empiricism and constructivism is breaking down. It is no accident that in the context of legal data coding, the word 'construct' is used to refer to a conceptual category which is intended to represent, but not to replicate, a prior empirical reality.[94] It is only in identifying the constructed or synthetic nature of a leximetric category that its value in knowledge creation can be adequately assessed. It matters, for example, that a given approach to leximetric coding might start from the basis that in benchmarking legal rules it is measuring 'costs', while another aims to measure the 'normative effect of a rule'.[95] It is also essential, when considering a leximetric index, to know why particular rules, and not others, were chosen as the basis for individual indicators; why exactly the scales contained in the indicators were chosen and how they map on to the dimensions of the phenomena to which they relate; and how indicators are weighted to produce an overall index.[96] In these various respects, to say that leximetric data are 'constructed' is not to concede their undue artificiality, but to accept the need for clarity and transparency in the coding process, without which no reliable evaluation of their knowledge content is possible.

There is a further sense in which leximetric coding elides the distinction between empiricism and interpretivism, and this is that it takes interpretation as its research object. Leximetric coding assumes that the legal texts which make up the primary source material for legal datasets have a sufficiently stable meaning for them to be consistently coded. The text is a signifier for the meaning of the norm in its legal and wider economic context; the legal text 'script-codes' a social practice. A legal rule or concept is, at one and the same time, a cognitive category, and a material one. Nor is there is any sense in which its cognitive dimension, the law, operates 'outside' reality. Legal concepts are themselves part of social reality.[97]

Statistical association and causal inference: time series econometrics

Leximetric data are produced for a specific purpose: their use in statistical analysis. Other uses, in particular the construction of league tables purporting to rank countries according to the intensity of regulatory regimes, are not just secondary to this purpose; they may

94 See Deakin, 'Quantitative Methods in Labour Law Research' (n 82 above) 462.

95 Ibid 463, discussing differences in this respect between the OECD Employment Protection Indicators and the CBR-LRI index of labour regulation.

96 Ibid 465.

97 Deakin, 'Juridical ontology' (n 68 above) 182.

be of questionable value when it is borne in mind that leximetric data are at best an incomplete representation of the state of the law in a given country. Text-based data coding produces what may be called a 'jural' account of the law (such as the normative content of statutes and cases), as opposed to the 'factual' account which can be inferred from evidence about the operation of the law in practice (such as numbers of minimum wage infractions, health and safety inspections, or labour court hearings). For this reason it is generally accepted that leximetric data need to be combined with data sources of other kinds when assessing the likely economic impact of a legal rule, or group of rules.[98] Despite this obvious qualification, country rankings based on unamended 'jural' measures not only continue to appear in official reports, but seem to have had, in a number of instances, a tangible influence on policy making.[99]

The use of leximetric data in statistical analysis, while essential if the potential of the data are to be realised, brings problems of its own. When data are arranged into time series, there is potential for regression analysis to find spurious correlations. This 'autocorrelation' is a function of the way in which time series are ordered as historical sequences; it can arise, in other words, as a matter of statistical representation, regardless of the underlying nature of the association between variables of interest.[100] But it is also possible for incorrect conclusions to be drawn from correlations which are otherwise genuine. As with the construction of data, statistical associations do not speak for themselves; they must always be interpreted. That there is a very high degree of correlation between two time series is not in itself evidence that the phenomena they represent are causally related.

Even if we can be confident that a statistical association is not a mathematical illusion and that it represents a real relationship between societal phenomena or events, it may not be possible to infer anything about the direction of causation. It has become standard to observe that 'causation does not equate to correlation', but the problem is more fundamental: statistical techniques are not well designed to deal with questions of causality. Econometric studies often have to posit a causal relation rather than setting out to prove one. While techniques exist for demonstrating that an event, such as the passage of a law, is more

98 Deakin, 'Quantitative Methods in Labour Law Research' (n 82 above) 469.

99 La Porta et al (n 85 above) 325.

100 The risks of spurious regressions in time series analysis have been known about virtually since the inception of the discipline of econometrics. See George Udny Yule, 'Why do we sometimes get nonsense correlations between time-series? A study in sampling and the nature of time-series' (1926) 89 Journal of the Royal Statistical Society 1. For discussion, see Deakin, 'Quantitative Methods in Labour Law Research' (n 82 above).

likely than not to have changed outcomes, these depend on statistical conventions rather than on the types of inference which are possible under conditions of controlled experiments. Randomised controlled trials (RCTs) of the kind which are used in an attempt to approximate experimental conditions are no exception to this principle: under certain tightly circumscribed conditions they can provide *greater* confidence than could otherwise be possible of the likely effects of a policy intervention, but all such studies are situated in time and space and how far they can be applied to other contexts is a matter of judgement.[101] To make this point is not to argue that statistical methods, including RCTs, have not advanced understanding of policy interventions. It is to argue that knowledge of the kind they produce should not be regarded as infallible but instead, in common with all social scientific knowledge, as provisional in the light of future studies and the refinement of techniques which they may make possible.

The kinds of questions raised in law and economics research, concerning the nature of the law–economy relation in general and the contribution of legal rules and systems to economic efficiency and growth in particular, are not necessarily well suited to being addressed through RCTs, which are in any event highly resource-intensive in addition to raising numerous ethical issues. Examination of the claims of legal origin theory has mostly proceeded through the use of statistical techniques which are understood to offer ways of testing for causation without recourse to trial data; these include the instrumental variable technique which was initially used by La Porta et al to show that legal rules were not necessarily endogenous to their context, but could operate as independent or causal variables. In their studies, 'legal origin', standing for the common law or civil law origin of a country's legal system was used as an instrument to clarify the direction of causation from legal rules to economic outcomes. To be effective, an 'instrument', in this sense, must be strictly exogenous both to the independent or causal variable, and the dependent or outcome one (or more precisely, to the error terms in the relevant regression model). Legal origin fitted this description because, in the case of nearly all countries, the adoption of common law or civil law legal 'infrastructure' was the result of a chance event, namely colonisation or conquest by one of or other of the 'origin' countries (Britain, France or Germany). However, La Porta et al came to modify their position, abandoning the use of legal origin as instrument in favour of treating

101 For discussion of RCTs in the medical and social sciences, see Angus Deaton and Nancy Cartwright, 'Understanding and misunderstanding randomized controlled trials' (2018) 210 Social Science and Medicine 2.

it as the principal exogenous cause of variations in the content of laws, and, ultimately, in economic performance across countries.[102]

So stated, the legal origin hypothesis is, in essence, a claim about legal evolution. For there to be an effect of such longevity and magnitude presupposes the presence of deep-rooted path dependences. Consistently with an evolutionary understanding, events at a particular point in time trigger trajectories of 'exaptation' and diversity across systems, rather than one of adaptation and convergence.[103] This is hard to square with the claim that there is a single efficient configuration of laws to which countries are all moving or to which they should seek to move; the early studies may have concluded that common law systems enjoyed superior economic performance, but the later emphasis on the lock-in effects of legal origin suggests, on the contrary, that there is limited scope for the alignment of laws across national systems or, at least, across the different legal 'families'. The empirical evidence, as it emerged, confirmed this suggestion: transplants are less effective across the civil law–common law divide.[104] Empirical analysis also cast doubt on the claim of the common law's supposed economic superiority.[105]

The initial legal origin studies relied on cross-sectional data on the content of laws, mostly drawn from a single year of observations. There is now a wide body of longitudinal data on which researchers can draw to test claims concerning the impact of law on economic performance. Econometric techniques have also been evolving to address the issue of serial correlation and the related risk of spurious regressions. Recognising that many historical data series are non-stationary, meaning that they are liable to depart from a pre-existing trend or path in response to an exogenous shock, the method of cointegration provides a way to overcome the serial correlation problem: where two non-stationary time series are linked by a common trend, they can be modelled as moving together over time, with the potential to converge in the long run.[106] By its nature, then, this technique is well suited to testing claims about the co-evolution of legal and economic phenomena. The related concept of Granger causality, which tests

102 See La Porta et al (n 85 above) 298–299, discussing reverse causality and the use of the instrumental variable technique.

103 On 'exaptation' in a legal context, see Deakin, 'Evolution for our time' (n 34 above) 10.

104 Daniel Berkowitz, Katharina Pistor and Jean-François Richard, 'Economic development, legality and the transplant effect' (2003) 47 European Economic Review 165.

105 See La Porta et al (n 85 above) 309: 'Legal Origins Theory does not say that common law always works better for the economy.'

106 Robert F Engle and C W J Granger, 'Co-integration and error correction: representation, estimation and testing' (1987) 55 Econometrica 251.

for the historical precedence of one variable over another by adding lagged values of the assumed independent variable to the regression equation,[107] can be used to test for the direction of causation between the economy and law.

Building on these techniques, vector autoregression (VAR) and vector error correction (VEC) models have been widely used in conjunction with leximetric time series to clarify aspects of the legal origin hypothesis. These studies show that changes to the content of legal rules are frequently endogenous to changes in economic conditions. Thus, stricter worker protection laws, rather than causing higher unemployment, may in reality be endogenous to the economic cycle: legislatures may respond to the threat of joblessness by making it more difficult for firms to dismiss workers.[108] The opposite is also possible if a recession reduces workers' bargaining power and hence their political leverage, but which effect is observed in any given country case is an empirical question, not one that can be answered *a priori*. Similarly, laws strengthening shareholders' rights may be an endogenous response to a rise in investor power and influence. This is not to say that law which is endogenous to the economy in this sense cannot also operate as independent variable with potential causal effects for the economy: it is plausible that laws passed in response to an external economic change will influence the economy in their turn, and empirical studies suggest that this is indeed the case.[109]

What these findings imply is that just as law does not respond to economic change in a linear fashion, nor do laws take automatic effect in the economy. Rather, laws can become adapted over time to particular economic and industrial phenomena, though coevolution and mutual reinforcement. If this process is specific to particular national contexts, coevolution of law and the economy *within* a country can lead to diversity and divergence *across* countries. Thus, the correlation observed in the legal origin studies between shareholder protection laws and dispersed ownership is best understood as a result of an extended coevolutionary process, involving mutual causation and the emergence over time of institutional complementarities.

The further correlation of these trends with common law legal origin is best explained by similar interdependencies: it is because

---

107 C W J Granger, 'Investigating causal relations by econometric models and cross-spectral methods' (1969) 37 Econometrica 324.

108 Simon Deakin and Prabirjit Sarkar, 'Indian labour law and its impact on unemployment, 1970–2006: a leximetric study' (2011) 49 Indian Journal of Labour Economics 211.

109 Simon Deakin, Prabirjit Sarkar and Mathias Siems, 'Is there a relationship between shareholder protection and stock market development?' (2018) 3 Journal of Law, Finance and Accounting 115.

England was a common law system, and also, during the period of its initial industrialisation, one characterised by a relatively high degree of shareholder protection coupled with liquid financial markets and dispersed ownership, that a structural association between legal origin, the content of laws and related features of financial markets was established. When English law was transplanted to British colonies, the common law served as a carrier of shareholder-friendly company laws and capital markets characterised by a high degree of liquidity. But the appearance of legal origin as the ultimate, exogenous cause of legal and financial development is just that: an appearance. It is possible for civil law origin systems to develop strong regimes for shareholder protection, in response, for example, to investor pressure, and for these laws in turn to have tangible effects on firms' capital structure and performance. If, thanks to path dependencies and lock-in effects, legal origin has an independent causal influence on economic growth, it is likely to be a relatively weak one, and less significant in practice than the content (for example, pro-shareholder or otherwise) of the relevant legal rules.

Machine learning and natural language processing

Machine learning (ML) is a set of computational techniques for transforming informational inputs into outputs using algorithmic modelling.[110] An algorithm in this context refers to a mathematical model prescribing a series of instructions for optimising a given function. The distinctiveness of ML is that the algorithms are designed to self-adjust in response to new data.[111] This can involve, for example, the parameters of a function being adjusted in order to achieve a better fit with the goal being optimised, a form of error correction known as 'backpropagation'.[112] Thus, an ML algorithm is endogenous to the data it is processing; in effect, it evolves through recursive iterations with its context.

In the case of 'supervised learning', the programmer defines the goal or output (commonly known as the 'ground truth'), which the model then optimises through recursion; with 'unsupervised learning', the ground truth is not defined in advance but is allowed to emerge on the

110 David Spiegelhalter, *The Art of Statistics: Learning from Data* (Pelican 2019) 144.

111 David Lehr and Paul Ohm, 'Playing with the data: what legal scholars should learn about machine learning' (2017) 51 UC Davis Law Review 655; Christopher Markou and Simon Deakin, 'Ex machina lex: the limits of legal computability' in Simon Deakin and Christopher Markou (eds), *Is Law Computable? Critical Perspectives on Law and Artificial Intelligence* (Hart 2020).

112 David Rumelhart, Geoffrey Hinton and Ronald Williams, 'Learning representations by back-propagating errors' (1989) 323 Nature 533.

basis of the clustering of variables with a high degree of self-similarity or proximity.[113] It is possible to combine the two approaches, for example by using unsupervised learning to identify an implicit or latent structure to the data, which is then used as the basis for the ground truth in a supervised-learning approach, enabling the dataset to be refined and its predictive capacity enhanced.

The value of ML as a tool for analysing legal texts depends in addition on the potential for using techniques of natural language processing (NLP), including lexical analysis, machine translation and information retrieval, to process texts at scale.[114] The premise of NLP is that natural language is a symbolic system for representing semantics. Text is, at one and the same time, a physical signal and a symbolic expression of meaning. NLP applications use mathematical modelling to identify latent or hidden linguistic structures which can be used to translate, predict and generate text.

The combination of NLP techniques with the subset of ML applications associated with 'deep learning' (DL)[115] has particular significance for legal (and law and economics) research. DL approaches make use of 'artificial neural networks' or ANNs, computational models which seek to replicate what is understood to be the process by which learning occurs through the human brain.[116] Learning in ANNs is modelled in terms of the interaction between an 'input layer' ('neurons') through which information is received, a 'hidden layer' of equations which transform inputs into outputs, and a set of vectors ('synapses') linking neurons together, with the result that the outputs from one form the input to another. The vectors or synapses are 'weighted' to reflect their relative importance in the overall model. The weights are adjusted over the course of successive iterations, enabling the model to 'learn'. DL applications are characterised by multiple 'hidden' layers, making it possible to model high-level 'concepts' out of lower-level representations. It is these techniques which are largely responsible for the recent advances in speech recognition and machine translation that have greatly extended the practical usefulness of NLP techniques and brought them to wide attention.

ML techniques should make it possible to improve the quality of leximetric datasets and to expand the range of questions which they

113 On the distinction between supervised and unsupervised learning, see Jürgen Schmidhüber, 'Deep learning in neural networks: an overview' (2014) arXiv:1404.7828.

114 Madeleine Bates, 'Models of natural language understanding' (1993) 92 Proceedings of the National Academy of Sciences 9977.

115 Yann LeCun, Yoshua Bengio and Geoffrey Hinton, 'Deep learning' (2015) 521 Nature 436.

116 Schmidhüber (n 113 above); Hasson et al (n 27 above).

are used to address. Topic modelling (TM), a type of statistical model for discovering abstract 'topics' from bodies of text, is proving useful in data-mining texts in order to discover latent or hidden semantic structure;[117] it has been used to model presidential speeches,[118] classify historical Hebrew texts,[119] and to identify trends in sociological abstracts.[120] Instead of requiring a human interlocutor to create or 'hand code' a taxonomy, TM allows corpuses to taxonomise themselves using the immanent structure of the underlying texts. This type of application could be used as a robustness test for 'hand-coded' leximetric data, although whether it could replace it entirely is an open question, given the multidimensional nature of the judgements involved in legal-coding process.[121]

In practice, there remain significant obstacles to the effective use of ML in the legal sphere. DL applications of the kind which may be needed to code data at scale are heavily resource-intensive. Facial recognition models of the kind currently being developed use deep convolutional ANNs with millions of parameters. The function they are seeking to optimise is a physical feature of human physiognomy which is assumed to be highly correlated with an individual's identity, the latter signifying not just a biological category but also an institutional (legal) one. To get any kind of reliable result, there has to be not just a training set of the right size (one such model requires over 200 million facial images and 8 million individual identities) but also a clearly defined objective function, learning rule, and network architecture.[122] A language model of the kind used to predict word strings and sentence

117 D J Carter, James Brown and Adel Rahmani, 'Reading the High Court at a distance: topic modelling the legal subject matter and judicial activity of the High Court of Australia, 1903–2015' (2016) 39 University of New South Wales Law Journal 4; D J Carter and Adel Rahmani, 'Proximity and neighbourhood: using topic modelling to read the development of law in the High Court of Australia' (2019) 45 Monash University Law Review 785; Pedro Henrique Luz De Araujo and Teófilo De Campos, 'Topic modelling Brazilian Supreme Court lawsuits' (2020) 334 Legal Knowledge and Information Systems 113; Arthur Dyevre and Nicholas Lampach, 'Issue attention on international courts: evidence from the European Court of Justice' (2020) 16 Review of International Organizations 793–815.

118 Michal Ovádek, '"Popular tribunes" and their agendas: topic modelling Slovak Presidents' speeches 1993–2020' (2020) East European Politics 214–238.

119 Chaya Liebeskind and Shmuel Liebeskind, 'Deep learning for period classification of historical Hebrew texts' (2020) Journal of Data Mining and Digital Humanities,

120 Giuseppe Giordan, Chantal Saint-Blancat and Stefano Sbalchiero, 'Exploring the history of American sociology through topic modelling' in Arjuna Tuzzi (ed), *Tracing the Life Cycle of Ideas in the Humanities and Social Sciences* (Springer 2018).

121 Deakin, 'Quantitative Methods in Labour Law Research' (n 82 above).

122 Hasson et al (n 27 above) 420.

structures requires 48 layers, 1.5 billion parameters, 8 million documents, and 40 gigabytes of text. This model can predict words based on preceding words, but does not even closely approach standard human capabilities to 'accumulate and integrate broadly distributed multimodal information over hours, days and years'.[123]

There are other problems with the use of ANNs to predict legal text. The issue of algorithmic 'bias' is not an accidental feature of the method, but intrinsic to its approach: an evolutionary model of the world reproduces the features of that world, including gender and racial bias. Since the early 1990s, models in computational linguistics based on the idea of 'distributed representation' have sought to represent words in a text as points in abstract vector space; words nearer to each other in that space are assumed be 'related' in a 'morphosemantic' or evolutionary sense. The hypothesis here is that words will tend to be found near words that are 'similar' to themselves, and that these similarities can be captured numerically. Today's models use ANNs to transform ('embed') a word into a set (or 'vector') of numbers that represent its 'coordinates' in that space. The coordinates of the word representations are adjusted so that the model can be 'trained' to guess the 'correct' word by nudging it towards (incentivising) a particular guess, and away (disincentivising) from a different one. After each guess (or iteration), another phrase is selected at random and the process is repeated until a 'correct' result, as defined, is arrived at. The word-embedding approach is capable of capturing a huge amount of real-world information and can mimic features of human cognition such as analogical reasoning and grammatical inference. It is also highly effective at capturing real-world biases: for example, associating the binary man:women with gendered stereotypes such as carpentry:sewing, or architect:interior designer, or doctor:nurse. One way to deal with this problem is to find the axis that captured the concept of gender and delete it. However, the problem with this is that not at all associations of the concept of gender are based on stereotyping; the challenge, as one research team put it, is 'to reduce gender biases in the word embedding while preserving the useful properties of the embedding',[124] but this remains work in progress.

The language models used by the growing number of LegalTech applications which have achieved a level of linguistic fluency employ techniques based on the word-embedding approach. They adopt a system-internal representation of 'law' on the basis of the word

123 Ibid 421.

124 Tolga Bulukbasi, Kai-Wei Change, James Zou, Venkatesh Saligrama and Adam Kalai, 'Man is to computer programmer as women is to homemaker? Debiasing word embeddings' (2016) Cornell University: Computer Science – Computation and Language arXiv:1607.06520 [cs.CL].

embeddings that comprise a given corpus. In principle they should be capable of replicating the kind of localised 'interpolations' which ANNs, in common with other evolutionary models, are designed to achieve. This process is of a qualitatively different order from the 'extrapolation' which occurs when a decision maker, such as a judge, generates a new meaning by synthesising existing concepts into a new one applicable to today's case.[125] For this reason, current legal-focused ML applications are in danger of 'freezing' in yesterday's legal solutions.[126]

If the use of ML in resource allocation and case prediction is likely to remain problematic, there are other, more constructive uses of ML. ML applications are in a line of descent from evolutionary models of the kind first developed in cybernetics and time-series econometrics. As such, they are well designed for use in identifying the long-run structural dynamics of legal and economic change. The ANNs used in ML applications are simplified models of the process of synaptic network connection which has been observed in the human brain. This form of 'neural computation' is similar to the 'direct fitting' which characterises evolution in nature: it 'relies on over-parameterised optimisation algorithms to increase predictive power (generalisation) without explicitly modelling the underlying generative structure of the world'.[127] This is also a good description of the kind of legal evolution which depends on trial-and-error learning to arrive at a provisional understanding of its context. Just as evolution in nature has allowed self-organising, well-adapted models of the world to be produced without prior design, the juridical analogues of variation, selection and retention enable legal systems to adjust to changing economic and political environments, in the process contributing to societal diversity and complexity. It is this dynamic process which ML applications should be well placed to model and explain.[128]

CONCLUSION

We have argued for a model of legal evolution which could usefully shape research into the structural dynamics of the law–economy relation, and help identify and resolve questions concerning the relationship between law and economic performance. Evolution, in our understanding, is

125 On the distinction between interpolation and extrapolation in this context, see Hasson et al (n 27 above); Simon Deakin and Christopher Markou, 'Evolutionary interpretation: law and machine learning' (2020 forthcoming) Journal of Cross-disciplinary Research in Computational Law.

126 Mireille Hildrebrandt, 'Code-driven law: freezing the future and scaling the past' in Deakin and Markou (eds) (n 111 above).

127 Hasson et al (n 27) 418.

128 Deakin and Markou, 'Evolutionary interpretation' (n 125 above).

a process of mutual adjustment between, and coevolution of, three elements: system, environment and code. Its principal resource is information, which is generated from the environment via selection and embedded in the code through inheritance or retention. The inter-temporal transmission of information results in variation in the characteristics of systems, and the cycle begins again.

The mechanism of variation, selection and retention can be observed not just in nature but in human culture and institutions, including legal ones. The process is blind or undirected, but is not random. The forms it produces are ordered representations of an ordered world. It can be expected to produce complexity and diversity, given enough time. One of its other results is stability, which can become stasis. There is no guarantee that it will produce optimal allocations. It may generate equilibrium solutions within a local design space but these may not be translatable to other contexts or more generally scalable. Because it is undirected and can only progress through recursive error correction, it is costly in terms of the resources generated and the necessary error rate.

It is not possible to ascribe purpose to evolution in nature; stability, diversity and complexity are by-products, not goals, of the evolutionary process. In a similar way, cultural or institutional evolution may produce stable designs with certain complex properties, and generate diverse institutional forms, but these cannot be said to be its objective or in any sense its predetermined outcomes. Since the outcomes of evolution are to a high degree indeterminate, it cannot be expected to have any particular normative content, whether that is described in terms of allocative efficiency or a given theory or idea of justice.

In the light of the above, it would seem that elevating evolution, as a blind, undirected or automatic process, above individual or collective agency as a mode of resource allocation, is a category error. Widening the space for evolution is to prioritise a process which is 'mindless' over others which enable human beings to apply the higher-order cognitive capacities which are one of the by-products of their biological evolution. Cultural or institutional evolution may have bequeathed similarly useful by-products in the social realm, but this type of evolution could be as much a barrier to overcome as a decision-making aid.

If evolution is not a model for human decision-making, evolutionary models may, nonetheless, help us to understand what is at stake in the operation of law as a mode of human governance. Law occupies a particular cognitive space, as a means by which a society's various modes of operation are recorded, retained, and diffused. To perform this task, law draws on the combinatorial power of human language, and, in the era of writing, on the stabilising properties of text. As a mode of representation, law is endogenous to its context, while also

maintaining its separation from it. Law's boundary with the economy and politics, while limiting its capacity to influence outcomes beyond that boundary, is the condition for the effectiveness of its own operations.

In its contemporary form, which has coevolved with the rise of the market economy, law is the publicly instituted expression of norms of behaviour which, among other things, guide economic exchange. This type of state-organised law is not beyond or outside the processes of cultural and institutional evolution which affect all social systems; the legal system, in Dennett's terminology, is a 'crane', not a 'skyhook'. The principal task of evolutionary law and economics should be to explain how the legal system, in its modern instantiation, has come to exist, and how it operates with respect to the economic and political systems, among others. It may be possible to provide a pre-legal understanding of the type of localised social order which operates between the ranchers of Shasta County or in the dense trading networks characteristic of Chinese *guanxi*, but these accounts do not explain the principal feature of a modern market economy, which is that most exchange takes place at scale and between strangers. Attention could usefully be redirected to the question of how the legal system structures that kind of trade.

With the digitisation of text, legal systems are operating within new technological parameters, with results which are difficult to predict. One immediate effect of the rise of machine learning and natural language processing is to provide researchers with new tools for modelling the law–economy relation. Machine learning relies on computational algorithms which are, by their nature, evolutionary. Thus they are in principle well suited to analysing the long-run dynamics of legal and economic change. Precisely because they model learning as a 'mindless' process of direct-fitting between system and environment, they may not be well suited to modelling decision-making by human agents, whether they be judges or law-makers.

The claim that computational algorithms should replace human decision-makers in the legal sphere as elsewhere is a direct line of descent from earlier claims for the general efficacy of evolution as a principle of institutional design. As before, this is to translate a descriptive model into a normative space. Evolution as method is one thing, evolution as norm entirely another.

Northern Ireland
Legal Quarterly
Winter Vol. 72 No. 4 (2021) 713–740
Article DOI: 10.53386/nilq.v72i4.908

Understanding the role of law and the legal system in economic development requires more than a purely economic model[1]

Frank H Stephen[2]

University of Manchester
Correspondence emails: frank.stephen@manchester.ac.uk

ABSTRACT

This article illustrates that an approach to law and economics which uses economic models and quantitative analysis without considering socio-cultural factors and lacks detailed legal understanding of the specific 'laws' being analysed can lead to problematic policy prescriptions. It shows that the 'law and finance' approach to law and economic development is flawed. More generally, the article demonstrates that law and economics cannot solely rely on the application of the techniques of economics but must also recognise the importance of culture in determining economic behaviour. The studies discussed utilise a New Institutional Economics model of the role of law and the legal system, draw on dimensional models of culture from cross-cultural psychology and utilise a Leximetric dataset containing more finely grained measures of creditor and investor protection indices than those used in earlier studies of the role of law in economic development. The evidence adduced suggests a strong and persistent transplant effect.

Keywords: law and economics; comparative law; legal culture; development; New Institutional Economics; finance; creditor protection; investor protection; empirical; legal transplants; Legal Origin Theory.

1 This article is based on an invited presentation at the 'law and economics' conference held at the University of Leicester's School of Law in July 2019. The author is grateful to the conference organisers Richard Craven and Olivia Hamlyn for comments on the article. Comments from participants in the conference, this journal's editor and its referees have helped to improve the article but, as always, any remaining flaws are those of the author.

2 Emeritus Professor of Regulation, School of Law, University of Manchester; and Research Associate, Centre for Business Research, University of Cambridge.

INTRODUCTION

'Law and Economics' in its modern form was crystallised in the early 1970s with the publication of the *Economic Analysis of Law* by Richard Posner,[3] a Professor of Law at the University of Chicago. The research programme from which it developed began with the analysis of tort law using the so-called Coase Theorem.[4] In the early years of its development this research programme essentially focused on analysing the common law. This led to a view that the common law was efficient.

The 'Chicago' approach to law and economics was criticised from a number of directions within economics not least from those promoting a more detailed analysis of institutions.[5] Since these early days, the application of economic reasoning to law has expanded greatly to include, *inter alia*, the use of New Institutional Economics (NIE). However, early on in these developments Ronald Coase, Nobel Laureate in Economics, writing about the expansion of economists into other social sciences wrote?[6]

> ... if the main advantage which an economist brings to the other social sciences is simply a way of looking at the world, it is hard to believe, once the value of such economic wisdom is recognised, that it will not be acquired by some practitioners in these other fields. This is already happening in law and political science. Once some of these practitioners have acquired the simple but valuable, truths which economics has to offer, and this is the natural competitive response, economists who try to work in the other social sciences will have lost their main advantage and will face competitors who know more about the subject matter than they do.

Lately, there has been increased use of the techniques of economics by scholars from other disciplines such as political science, history and law. However, there continue to be instances of the narrow approach to law and economics being carried out with significant impact on policymaking. The present article draws on two studies in the field of law and finance to illustrate that, when economists ignore the insights of other social sciences, they may prescribe policies for multilateral lending agencies such as the World Bank which have negative consequences for the client countries of such multilateral agencies.

In recent years, multilateral development agencies have promoted an approach to economic development which is market led. They have

---

3 Richard Posner, *Economic Analysis of Law* (Little, Brown & Co 1972).

4 Roald Coase, 'The problem of social cost' (1960) 3(1) Journal of Law and Economics 1–44.

5 See for example, Frank H Stephen, *The Economics of the Law* (Harvester Wheatsheaf 1988) 184–193.

6 Ronald Coase, 'Economics and contiguous disciplines' (1978) 7(2) Journal of Legal Studies 201–211 at 210.

promoted the idea that efficient markets will enhance development and, in particular, that an efficient financial system will stimulate growth by selecting the most viable investments. This approach has been supported by projects such as *Doing Business* which has published data on an increasing range of regulatory and legal matters in an increasing number of countries since 2003.[7] This project in recent years has ranked countries' performance in ease of doing various business measures. The value of such measures has been criticised by a number of authors.[8] Kelley et al[9] have argued that the publication of *Doing Business* rankings has motivated reforms in a number of jurisdictions. These authors provide evidence that publication of *Doing Business* rankings encourages competitiveness in adopting these reforms among the elites of countries covered.

The *Doing Business* project appears to be motivated by the research programme of Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert W Vishny (LLSV), which has come to be known as Legal Origin Theory.[10] Essentially, this approach argues that the investor and creditor laws of the common law jurisdictions are superior to those in civil law jurisdictions in promoting financial development and hence growth. A consequent policy prescription is that the rules observed in common law jurisdictions should be adopted by those jurisdictions which do not already have them.

Legal Origin Theory is an example of research still being undertaken in law and economics almost 20 years after Coase's admonition, which ignores relevant and valid insights from other social sciences which nullify its own conclusions. We draw on two papers from an alternative programme of research which illustrate that when insights

---

7 See World Bank, Business Enabling Environment.

8 Benito Arruñada, 'Pitfalls to avoid when measuring institutions: is doing business damaging business?'(2007) 35(4) Journal of Comparative Economics 729; Claude Menard and Bertrand du Marais, 'Can we rank economies according to their economic efficiency?' (2008) 26 Washington University Journal of Law and Policy 55.

9 Judith G Kelley, Beth A Simmons and Rush Doshi, *The Power of Ranking: The Ease of Doing Business Indicator as a form of Social Pressure* (Annual Meeting of the American Political Science Association Mini-Conference on Assessment Power in World Politics Philadelphia PA, 2 September 2016).

10 Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert W Vishny, 'Legal determinants of external finance' (1997) 52 Journal of Finance 1131; Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert W Vishny, 'Law and finance' (December 1998) 106(6) Journal of Political Economy 1113; Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert W Vishny, 'Investor protection and corporate governance'(2000) 58 Journal of Financial Economics 3; Rafael La Porta, Florencio Lopez-de-Silanes and Andrei Shleifer, 'The economic consequences of legal origins' (2008) 46(2) Journal of Economic Literature 285.

from other social sciences and the more detailed subject knowledge of legal academics are incorporated into tests of the influence of law on financial development the results of Legal Origin Theory are nullified.

This alternative research programme differs from Legal Origin Theory in four respects:

1 It is based on a model of economic behaviour which recognises the importance of institutional constraints, namely NIE.
2 It uses a more finely tuned set of indices of investor and creditor protection laws covering several years. A number of criticisms have been made of the legal indices used in empirical tests of Legal Origin Theory.[11] Alternative measures of investor and creditor protection rules have been developed through the Centre for Business Research (CBR) at the University of Cambridge which it is argued overcome the deficiencies of those devised by LLSV. These, so-called, Leximetric indices[12] are used in the second of the papers discussed below.
3 It accounts for cross-cultural differences in behaviour. Legal Origin Theory also ignores the insights gained from researchers in the field of cross-cultural psychology[13] who have demonstrated the existence of distinct cultural regions which exhibit significant and consistent differences in social behaviour. The research programme reported in the present article takes account of culture and finds that studies which ignore cultural differences wrongly impute differences in financial development to differences in legal systems rather than to cultural differences.
4 It takes into account the historical process through which jurisdictions acquired their current legal systems. Cultural differences are also shown to interact with the process by which

11 These include errors in the scores given to particular jurisdiction in the indices of creditor and investor protection indices; there is a home country bias in that the authors only look for provisions similar to those which appear in US law; there are inconsistencies in coding; the role of case law in civil law jurisdictions is misunderstood; most investor protection laws in common law jurisdictions are a consequence of legislation and not judicial law making; the use of 0/1 indicators is too crude; provisions of individual laws cannot be separated from their legal and social context; they fail to consider the interaction between the provisions of the law and their enforcement. These are outlined in more detail by Frank H Stephen, *Law and Development: An Institutional Critique* (Edward Elgar Publishing 2008).

12 J Armour, S Deakin and M Siems (2016) 'CBR Leximetric datasets'.

13 See, for example, Shalom H Schwartz, *Cultural Value Orientations: Nature and Implications of National Difference* (2008 State University-Higher School of Economics Press) and Geert H Hofstede, *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations across Nations* (Sage Publications 2001).

> elements of the legal system have been transplanted from one social and legal context to another. Indeed, the research which has led to the identification of such a 'transplant effect' illustrates the benefits of collaboration between economic and legal scholars.[14]

The present article draws on the two studies[15] from a research programme which applies an NIE model to analyse the role of the law and the legal system in the process of market-led economic development as promoted by multilateral development agencies such as the World Bank. This model suggests that policies that promote the adoption of legal rules deemed to be effective in promoting financial development in developed countries (and common law countries in particular) as a route to promoting development will not have the intended effect when they clash with the legal culture of the recipient jurisdiction. The two empirical studies from this programme covering different time periods and sample countries provide evidence to support this contention.

The next section of this article outlines the key components of the NIE model derived by the present author. This develops Oliver Williamson's Levels of Social Analysis framework under which market organisation is constrained by governance structures which in turn are constrained by the institutional (including legal) environment. The institutional environment is in turn constrained by what Williamson calls embeddedness which may be interpreted as culture. Our NIE model uses the cultural regions identified by Shalom Schwarz through his dimensional model of culture to track 'variations' in culture across jurisdictions which is discussed in the third section below. This is followed by a discussion of the Transplant Effect which arises when laws or rules from one jurisdiction are transplanted to another whose legal culture is unreceptive to the transplant. It is argued that in such circumstances the effectiveness of the legal system will deteriorate. The subsequent section reports on two studies which provide empirical applications of the NIE model of the role of the law and the legal system in economic development. The reported results show: that the characteristics of the legal environment influence financial development but make clear that the effectiveness of the legal system interacts with law on the books in such a way that the impact of particular laws on financial sector development is likely to be lower the lower is legal effectiveness; the indices of shareholder and creditor protection are found to converge over time but the index of legal

14 See Daniel Berkowitz, Katharina Pistor and Jean-Francois Richard, 'Economic development, legality, and the transplant effect' (2003) 47 European Economic Review 165–195.

15 Stephen (n 11 above); Frank H Stephen, Simon Deakin and Boya Wang, *The Role of the Legal System in Financial Sector Development* (December 2020 Centre for Business Research, University of Cambridge).

effectiveness for jurisdictions is relatively stable across cultures; and evidence supporting the transplant effect and rejecting Legal Origin theory is found in the data.

THE ROLE OF LAW AND LEGAL SYSTEM IN ECONOMIC DEVELOPMENT

Stephen[16] argues that to understand the role of law and the legal system in the process of economic development requires a theoretical basis. We contend that NIE has the potential to provide such a theory. In this section we outline a framework for such a theory.

Nobel laureate in Economics, Douglass North provides an explanation of the role of institutions in the process of economic change. North defines 'institutions as the humanly devised informal and formal constraints on behaviour and their enforcement characteristics. He further defines organisations as groups of individuals who come together for a common purpose. Economic change arises when 'organisational entrepreneurs' see that they will be better off by the change. For North, norms of behaviour, conventions and self-imposed codes of conduct are informal institutions and rules; laws and constitutions are formal institutions. North also categorises the enforcement characteristics of informal and formal institutions as themselves being institutions. Organisations can be political, social, economic or educational.[17] The enforcement characteristics of institutions give rise to transaction costs. North characterises institutions as the rules of the game and organisations as the players of the game.

Another Nobel laureate in economics, Oliver Williamson, developed transaction cost economics. He explains that human and environmental characteristics give rise to different levels of transaction cost for mediating a transaction by different means. The different means of mediating the transaction are what Williamson calls governance structures. These governance structures can be the market, firms of different types and hybrids. Menard and Shirley[18] suggest: 'Some of the differences between North and Williamson may be less problematic than is often perceived, since they are similar to the differences between a macro and micro perspective.' They also point to other definitional

16 Stephen (n 11).

17 Geoffrey M Hodgson, 'What Are Institutions?' (2006) XL(1) Journal of Economic Issues 1, has argued that North's organisations are in fact also institutions and quotes correspondence from Douglass North which concedes this but argues that for analytical purposes it is useful to distinguish between them.

18 Claude Ménard and Mary M Shirley, 'The future of new institutional economics: from early intuitions to a new paradigm?' (2014) 10 Journal of Institutional Economics 541.

differences. They suggest that a major challenge for NIE is 'how do the (Northean) rules that determine the security and functioning of property rights or the laws that affect contractual credibility and enforcement shape the choice of (Williamsonian) modes of governance and of the ways to organize transactions?'.[19]

A step in this direction is provided by Williamson[20] who summarises the concerns of NIE through a framework of four 'levels of social analysis'. These are shown in Figure 1, which is adapted from Figure 1 of Williamson.[21] It allows us to see the influence which institutions have on economic behaviour. At the foot of the diagram is 'resource allocation'. This is the concern of neoclassical economics: economic agents react to the signals provided by product and factor markets in allocating scarce resources to different activities. Williamson refers to this as 'third order economising', with the purpose of getting the marginal conditions right. The solid arrow from the level of governance to resource allocation in Figure 1 is used to indicate that resource allocation is constrained by existing 'governance structures'. While resource allocation takes place on a continuous basis, governance structures take longer to adjust. Williamson suggests from one to ten years. Thus, at any point, resource allocation is constrained by existing governance structures. However, over time governance structures can be adjusted in response to inefficiencies through a feedback loop as indicated by the broken vertical arrow in Figure 1.

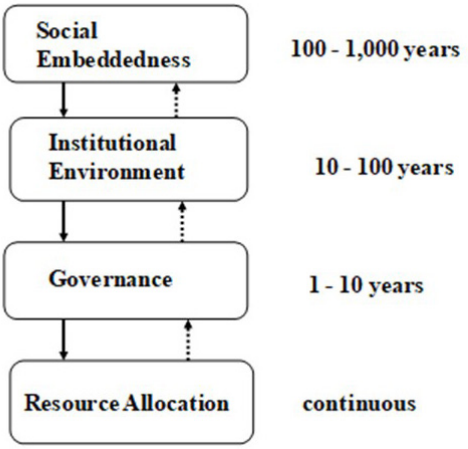

Figure 1: Williamson's framework.[22]

19 Ibid 559.

20 Oliver E Williamson, 'The New Institutional Economics: taking stock, looking ahead' (2000) 38 Journal of Economic Literature 595.

21 Ibid.

22 Adapted from Willliamson (n 20 above).

Williamson identifies the governance structure level with transaction cost economics. At this level, for example, contracts are used to align governance structures with transactions, but it also includes the development of organisational forms to cope with complex incomplete contracts – eg firms with different organisational and ownership structures, bureaucracies, regulatory bodies, mutuals etc. Transaction cost economics analyses these differing governance structures as arising to minimise transaction costs. Williamson styles activity at this level as second order economising. The characteristic economising decision at this level is that of 'make or buy'. Should a firm purchase a particular input across a market interface and thus govern the transaction by contract or should it produce it in-house and govern it by hierarchy? According to Williamson, the choice depends on transaction costs. Changes in governance structures cannot be instantaneous. However, this economising behaviour is itself constrained by the institutional environment within which it takes place, as indicated by the solid arrow from institutional environment level to the governance level in Figure 1 (above). In Williamson's model the *institutional environment* consists of formal rules: constitutions; laws; property rights. Economising behaviour at this level, which Williamson labels first order economising, encompasses the legislative, executive and judicial functions of government. He particularly stresses the defining and enforcement of property rights and contract laws. Adjustments at this level, it is argued, can take from a decade to a century. As Figure 1 indicates, changes at this level are constrained by what Williamson refers to as embeddedness, which includes informal institutions, norms and religion. However, there may be feedback from the governance level to the embeddedness level. Williamson refers to the institutional environment as setting the 'formal rules of the game' and governance as the 'play of the game'. The embeddedness level might be seen as providing the *informal* rules of the game. It is non-calculative and spontaneous. It provides the socio-cultural context. Williamson refers to behaviour at this level as being 'adopted' and subject to inertia.

We can relate Williamson's framework to Douglass North's analysis of economic change.[23] Table 1 summarises the constituent parts of each framework. As can be readily seen, there is considerable overlap. North's institutions correspond to a combination of Williamson's embeddedness and institutional environment levels. We also map North's framework onto Williamson's in Figure 2. Williamson's resource allocation level corresponds to North's transformational sector in which inputs are

23 John Joseph Wallis and Douglass C North, 'Measuring the transaction sector in the American economy, 1870–1970' in Stanley L Engerman and Robert E Gallman (eds), *Long-term Factors in American Economic Growth* (Chicago University Press 1986).

transformed to outputs. However, the two frameworks differ at the intermediate level. Williamson's governance structures bear some similarities to North's organisations: firms, bureaucracies, mutuals etc are organisations. Williamson, however, includes markets as governance structures, but they are not usually thought of as organisations. There is also the subtle difference that Williamson refers to governance structures as 'the play of the game', whilst North refers to organisations as the players. This suggests Williamson sees governance as a process, while North sees organisations as actors. Williamson is essentially concerned about how contractual relationships are mediated and the way in which transaction costs shape the choice of governance structure from those which are available given the institutional environment. North stresses the role of organisational entrepreneurs as the agents of change in the economic and political context, whereas Williamson is concerned with governance structures as constraining resource allocation. In one sense Williamson is really focused on the downward constraints, illustrated in Figures 1 and 2 by the solid downward arrows, while North is particularly concerned with the upward broken arrows, particularly between the organisational level and the institutional level. Consequently, Williamson's analysis is static in nature whilst North is trying to understand the dynamics of change over time. Although Williamson recognises the existence of feedback loops, that is not really his concern. He does not discuss who initiates that feedback or what process brings about change. Indeed, in an article in 2000, he explicitly notes that he ignores the feedback loops.[24]

Although in the same article, he distinguishes between embeddedness and the institutional environment, he explicitly locates informal institutions at the former level. Thus, we can see that North's institutions (or institutional matrix as he sometimes refers to it) encompass both Williamson's embeddedness and Williamson's institutional environment, but Williamson may be seen as distinguishing between the two levels because he essentially regards formal institutions as potential policy variables and hence subject to conscious manipulation by policymakers, whereas informal institutions are not 'designed' by policymakers but are adopted and subject to inertia. Yet, he does recognise that embeddedness constrains the choice of institutions. The timescales shown in the right-hand side of Figure 1 emphasise the inter-temporal differences between Williamson's levels.

It should be noted that both Williamson and North stress the importance of enforcement of property rights and laws in their discussions of institutions. The question of enforcement has featured

24 See Williamson (n 20 above).

Williamson's Framework	North's Framework
Embeddedness Informal institutions, norms and religion.	*Institutions* Informal constraints (eg norms of behaviour, conventions, self-imposed codes of conduct), formal constraints (eg rules, laws, constitutions) and their enforcement characteristics.
Institutional Environment Constitutions, laws, property rights (defining and enforcing).	
Governance Contracts, firms with different organisational and ownership structures, bureaucracies, regulatory bodies, mutuals etc, hybrids.	*Organisations* Individuals in groups for a common purpose. They can be political, economic, social and educational.
Resource Allocation Getting the marginal conditions right.	*Transformation Sector* Transformation of resources into outputs.

Table 1: Comparing Williamson's and North's frameworks. Source: Stephen.[25]

in both Legal Origin Theory and (as legality) in the literature on the transplant effect (see further below).

Williamson's framework for social analysis, summarised in Figures 1 and 2, is a relatively simple and linear model, but nevertheless it provides a very powerful insight into the limitations of neoclassical economics as a framework for understanding the process of economic development and particularly as the basis for development policy. Advocates of a market-based approach to development relying solely on neoclassical analysis are likely to support the withdrawal of the government from many areas of economic activity, the privatisation of assets and reliance on market forces to generate an efficient allocation of resources and hence enhance economic development. What Figure 1 amply demonstrates is that the reallocation which would take place is heavily constrained by governance structures, the institutional environment and embeddedness. In particular, what would be an efficiency-enhancing reallocation in one social context would not be one in another social context with a different legal or political system and

25 Source: Stephen (n 11 above).

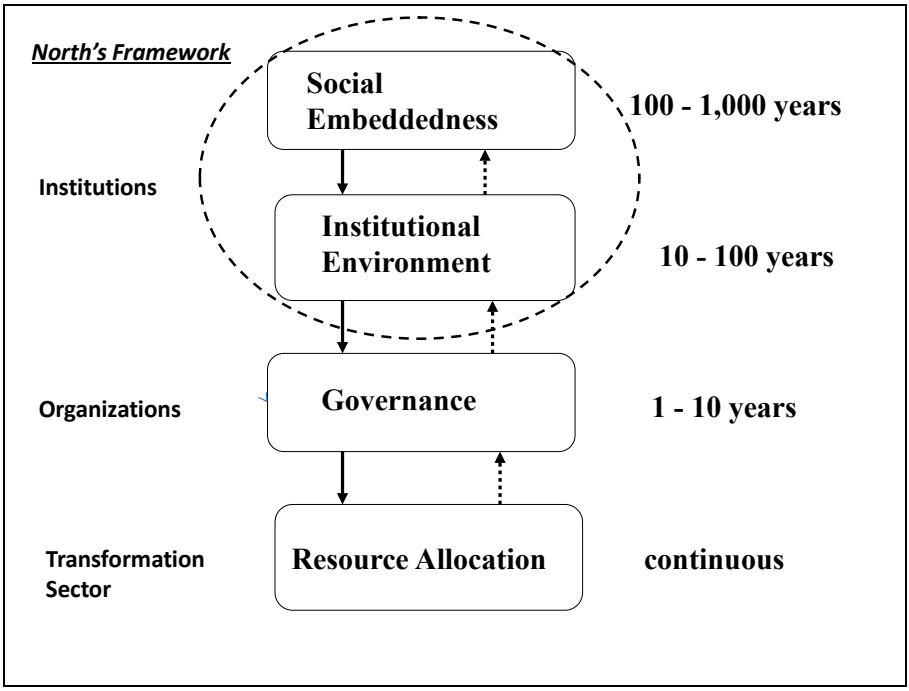

Figure 2: Williamson's and North's frameworks.[26]

different social customs or religious norms. Put differently, a market-induced reallocation of resources in one social context might not be possible in another because property rights might differ between the two contexts and thus relative prices of resources might differ leading to different marginal decisions by economic agents. For example, a resource such as a particular category of land might be alienable (and thus its ownership transferable) in one social context but not in another due to social custom. Thus, in the second context, even if property rights are changed by legislation, owners of this particular category of land might not be willing to sell it due to the social custom which inhibits its sale.

Williamson's framework can be used to motivate a model of the determinants of growth in order to examine the role which the law and the legal system play in the process of development. Williamson's constraints help in distinguishing between exogenous and endogenous variables in that model. However, to construct a model of development which recognises the institutional and cultural constraints placed on policymakers we need a means to account for the constraints imposed at the embeddedness level. We turn to this in the next section.

26 Ibid.

CULTURE, LAW AND DEVELOPMENT

Much NIE analysis focuses on the institutional environment. It takes embeddedness or the socio-cultural context as given and examines the implications for governance structures. In this section we focus on embeddedness in order that we articulate the relationship between embeddedness and the legal environment. We begin with an analysis of the relationship between legal institutions and culture. It draws on empirical studies which test whether such a relationship, indeed, exists. We examine the dimensions of culture and how they might be measured and relate them to measures of the legal institutions in different countries. A relationship between the socio-cultural variables and legal variables is found to exist.

In the previous section we introduced Williamson's 'levels of social analysis' as a framework by which to assess the role which law plays in the process of economic development. In that framework the institutional environment is constrained by what Williamson calls 'embeddedness', which we might also call the socio-cultural context. We will draw on a series of empirical papers in the field of corporate governance which examine the relationship between dimensions of culture and corporate governance rules.

Williamson's levels of social analysis framework treats embeddedness/socio-cultural context as a constraint on the legal environment – ie a restraint on the adoption of (increasing the transactions costs of) certain legal rules. However, particular cultures may enhance or encourage the adoption of particular rules, for example a society in which individuals are encouraged to be assertive and promote their own interests may be more likely to favour a system of corporate governance under which individual shareholders are able to challenge decisions by boards of directors in the courts. Intuitively, it seems likely that such culture factors will have an influence on the development of a jurisdiction's legal system. However, it is also likely that through time the legal system may affect people's behaviour and consequently influence the cultural context in future. Indeed, Williamson's framework does allow for a feedback loop from institutional environment to embeddedness. The relationship between cultural context and the legal environment is undoubtedly a complex one. However, the potential for the cultural context to raise the transaction costs associated with legal reform should caution policymakers, particularly in multilateral development institutions, against promoting legal transplants without considering the potential cultural resistance.

One difficulty in analysing the role of socio-cultural factors are the wide-ranging definitions of culture which are available and their often casual or informal use. There is a need to make the idea of culture operational so that the relationship between culture and law can be

tested. Amir Licht has argued that 'Cross-cultural psychology has made considerable progress toward developing an analytical framework for comparing cultures.'[27] He and a number of co-authors have used so-called 'dimensional models of culture' to examine the relationship between corporate governance laws and cultural dimensions. In particular, they have used the dimensional models of Geert Hofstede[28] and Shalom Schwartz[29] in this context. These cultural dimensions have also been used by Breuer and Saltzman in a thorough empirical study of culture and corporate governance.[30] Stephen has used Schwartz's cultural regions to examine differences across these regions in corporate governance.[31]

Geert Hofstede developed his set of cultural value dimensions in the 1960s and 1970s from studies of IBM employees in a number of countries. The value dimensions developed from Hofstede's work are:

- 'individualism/collectivism', sorting between societies where the individual is seen only as loosely linked to the rest of society and cares only for self and immediate relatives and those where the individual is seen as part of a closely knit group such as family or clan which provides security in exchange for loyalty;
- 'power distance', differentiating between societies which regard unequal distributions of power in institutions as legitimate or not;
- 'uncertainty avoidance', being comfortable or uncomfortable with uncertainty or ambiguity;
- 'masculinity/femininity', prizing achievement, heroism and material success as opposed to relationships, modesty and interpersonal harmony; and

27 Amir Licht, 'Culture and law in corporate governance' Working Paper 247/2014 (March 2014 European Corporate Governance Institute Law).

28 Hofstede (n 13 above); Geert H Hofstede, Gert Jan Hofstede and Michael Minkov, *Cultures and Organizations: Software of the Mind* 3rd edn (McGraw-Hill 2010).

29 Shalom H Schwartz, 'Cultural value differences: some implications for work' (1999) 48 Applied Psychology: An International Review 23; Shalom H Schwartz, 'A theory of cultural value orientations: explication and applications' (2006) 5 Comparative Sociology 137; Shalom H Schwartz, 'Culture matters: national value cultures, sources and consequences' in Robert S Wyer, Chi-yue Chiu and Ying-yi Hong (eds), *Understanding Culture: Theory, Research and Application* (Psychology Press 2009).

30 Wolfgang Breuer and Astrid Juliane Salzmann, 'National Culture and Corporate Governance' in Sabri Boubaker, Bang D Nguyen and Duc K Nguyen (eds), *Corporate Governance: Recent Developments and New Trends* (Springer Verlag 2012).

31 Frank H Stephen, 'New Institutional Economics, culture and corporate governance' in Franklin N Ngwu, Onyeka K Osuji and Frank H Stephen (eds), *Corporate Governance in Developing Markets* (Routledge 2017) 45-60.

- 'long-term orientation', having a long-term orientation favouring thrift and persistence.

Hofstede's work has been used widely in the management literature. Shalom Schwartz developed his set of bipolar culture dimensions in the 1990s and validated them with fieldwork in over 60 countries. The dimensions identified by Schwartz are:

- 'embeddedness/autonomy', at the embeddedness end of this dimension the individual is seen as subsumed within the group implying maintenance of the status quo, propriety and order whilst at the other pole the individual is autonomous and self-fulfilling;
- 'hierarchy/egalitarianism', where at the hierarchy pole there is a willingness to play an assigned role within a recognised unequal distribution of powers and roles while at the other pole a willingness to promote the interests of others is favoured; and
- 'mastery/harmony', where mastery connotes a society where there is an emphasis on promoting self interest in the natural and social environment whereas harmony implies subsuming one's interest in the environment.

Schwartz*	**Hofstede****
English Speaking	Anglo
West European	Germanic Nordic More Developed Latin
East Central Europe and Baltic States	-
Eastern Europe and Balkans	-
Latin American	Less Developed Latin
South and South East Asia Confucian	More Developed Asian (consisting only of Japan), Less Developed Asian
Muslim Middle East and Sub-Saharan Africa	Near Eastern

Table 2: cultural regions. *As reported in Schwartz.[32] ** As reported in Breuer and Saltzman.[33]

32 Schwartz (n 13 above).
33 Breuer and Saltzman (n 30 above).

Schwartz's cultural dimensions have been used widely in the social sciences and particularly in the fields of law and corporate governance through collaboration with Amir Licht and others.

Both the Hofstede and Schwartz value dimensions for individual countries have been used to generate cultural regions where the similarities within regions outweigh the differences between regions. The cultural regions differ across the two systems, *inter alia*, because of differences in country coverage. The cultural regions identified by Schwartz have developed over time as more countries have been included. Those summarised in Table 2 are drawn from Schwartz's 2008 paper.[34] Hofstede does not include any Eastern European or African countries in his coverage. The countries in Hofstede's Near Eastern region are Greece, Turkey and Iran, which under Schwartz regions are in Western Europe, Eastern Europe and not included respectively. Brazil and Argentina are in Hofstede's More Developed Latin (along with many European countries).[35]

Schwartz[36] argues that the cultural regions which his surveys have identified 'are related to geographical proximity ... they also reflect shared histories, religion, level of development, culture contact'. Schwartz[37] characterises the Western Europe Cultural Region as being high on autonomy, harmony and egalitarianism while the 'Sub-Saharan Africa and Middle Eastern' and 'South and South-East Asian' regions are high on embeddedness and hierarchy, and the 'Confucian' region is high on hierarchy and mastery. The 'English-speaking' region is high on autonomy and mastery.

Williamson's levels of social analysis model, outlined earlier, suggests that cultural context constrains the institutional environment including the legal environment. Following on from differences across cultural regions as identified by Schwartz we would thus expect different cultural regions to develop different legal environments. A number of authors have investigated empirically the link between cultural value dimensions and the legal system. For example, Stephen[38] has shown that values of a 'rule of law index' and an enforcement index constructed by Pistor et al[39] for transition countries in Europe are statistically

34 Ibid.

35 As reported in Amir Licht, Chanan Goldschmidt and Shalom H Schwartz, 'Culture, law, and corporate governance' (2005) 25 International Review of Law and Economics 229.

36 Shalom H Schwartz, 'Mapping and interpreting cultural differences around the world' in H Vishen, J Soeters and P Ester (eds), *Comparing Cultures, Dimensions of Culture in a Comparative Perspective* (Brill 2004).

37 Schwartz (n 13 above).

38 Stephen (n 31 above).

39 Katherina Pistor, Martin Raiser and Stanislaw Gelfer, 'Law and finance in transition economies' (2000) 8 Economics of Transition 325.

related to the cultural region to which Schwartz has allocated that country. Thus, not only may 'laws' differ across jurisdictions from different cultures (laws on the books), but specific laws or rules may operate differently across jurisdictions from different cultures (law in action) Therefore, in analysing the role of law on the process of development we must take account not only of the law on the books but law in action.

THE TRANSPLANT EFFECT

The policy of market-led development promoted by multilateral development agencies has at its foundation Legal Origin Theory, which not only posits that laws governing investor and creditor protection as developed in common law jurisdictions promote financial sector development but also that their adoption in other jurisdictions will improve the prospects of economic development in those jurisdictions. This contention has been challenged by a group of researchers who have sought to measure the effectiveness of transplants between jurisdictions. Berkowitz et al[40] and Pistor et al[41] point out that all jurisdictions have been the subject of legal transplants. Modern legal orders have developed from earlier legal orders by adopting elements of others' legal systems whether by conquest, emulation or imposition.

In much of Europe conquest by the Romans brought the transplanting of Roman law which was mixed with some remnants of customary law. The Norman Conquest of England in 1066 led to further developments which were then consolidated from the sixteenth to nineteenth centuries as what we now know as the common law, which was subsequently exported through colonisation to many parts of the world. In the settler colonies of North America, Australia and New Zealand the common law operated without being influenced by local customary law. In other British colonies local customary law remained important in areas such as family law, but the common law dominated commercial law.

In most other European jurisdictions Roman law remained dominant until the nineteenth century introduction of the Napoleonic code in France and subsequently through much of Western Europe. Many Latin American colonies on independence retained the French civil code as transmitted through Spanish colonisation. In many cases while the colonial power's legal order evolved subsequently its colonial manifestation remained largely unchanged. The German civil code,

40 Berkowitz et al (n 14 above).

41 Katherina Pistor, Yoram Keinan, Jan Kleinheisterkamp and Mark D West, 'Evolution of corporate law and the transplant effect: lessons from six countries' (2003) 18 World Bank Research Observer 89.

developed in the second part of the nineteenth century, was adopted by Japan and subsequently by China and Korea.

In more recent times legal transplants have taken place through a form of conditionality. In Europe, central and eastern European countries wishing to accede to the European Union revised their legal order to comply with the norms of existing members. More widely, many developing countries have been encouraged by the World Bank and others to adopt investor and creditor protection rules more typical of common law jurisdictions.

The writers in the transplant effect literature argue that the process of transplanting is crucial in determining the success of the transplant. It is this which determines what these writers call 'legality'. By 'legality' they mean the 'importance of enforcement and effective legal institutions'.[42] Put another way, the process of transplantation determines how well the transplanted law is enforced. Whether the transplant is introduced through conquest, emulation or imposition will affect its receptivity, defined as the country's ability to give meaning to the imported law. Thus, transplants which arise from emulation of a foreign jurisdiction's law are likely to be well received and adapted to the recipient jurisdiction's legal culture. On the other hand, laws transplanted as a result of conquest or other forms of imposition are less likely to be adapted to the recipient's legal culture. Where laws are adapted to local conditions, they are likely to have been more sensitively appraised and consequently used by local legal actors. Berkowitz et al[43] argue, for example, that some countries which received the Napoleonic code through conquest adapted it to local conditions[44] whilst others[45] did not. In their empirical work Berkowitz et al[46] distinguish between receptive and unreceptive transplants using adaptation as an indicator of receptivity. Another factor which is likely to increase receptivity is familiarity. If a transplant has its origin in a similar legal order to that of the recipient, it is more likely to be a receptive transplant. A transplant from one civil law jurisdiction to another civil law jurisdiction is likely to be more easily assimilated into the recipient jurisdiction than would be one from a common law jurisdiction.

Where transplants arise from conquest or imposition they may be seen as supply driven. On the other hand, when they arise from emulation they may be seen as being demand driven. Receptivity is likely to be increased when a transplant is demand driven. This does not mean that a supply-driven transplant cannot be successful, but

42 Berkowitz et al (n 14 above).
43 Ibid.
44 In their sample: Belgium, Italy, Netherlands.
45 In their sample: Portugal, Spain.
46 Berkowitz et al (n 14 above).

where it is not sympathetic to the recipient's legal culture the cost of achieving success will be higher because transaction costs will be greater. Although some countries received their transplant through conquest, there may have been powerful groups within the recipient who benefited from the transplant and, as a consequence, resistance to it was reduced – the transaction costs (both political and economic) were lower. In the terminology of NIE, unreceptive transplants raise transaction costs because the transplanted laws do not fit well with the recipient jurisdiction's legal environment and/or clash with its culture. Receptive transplants generate lower transaction costs because the laws being transplanted are compatible with the recipient's legal environment and culture. This approach further strengthens the need for any analysis of the role of the law and legal system in the process of development to take account of culture.

Berkowitz et al[47] estimate the determinants of legality and gross national product (GNP) *per capita* from a dataset of 49 countries and show empirically that the transplant effect on GNP *per capita* is achieved indirectly through the influence of legality on GNP *per capita*. Adoption of an unreceptive transplant reduces legality, that is to say it reduces the effectiveness with which the transplanted rules are applied in the courts or economic actors use resources in trying to circumvent the transplanted rules. They illustrate their results with the example of Colombia whose GNP *per capita* in 1994 was $1400. If that country had been the recipient of a receptive transplant their estimates suggest that its GNP *per capita* would be raised to $3785 because 'legality' would be enhanced. However, an unreceptive transplant of the German code would only raise GNP *per capita* to $2690, and an unreceptive transplant of the common law would have left GNP *per capita* unchanged.

Pistor et al[48] examined the experience of legal transplants in those countries making the transition from socialism to a market economy. They analysed data from 24 countries covering the Confederation of Independent States (CIS), Central and Eastern Europe (CES), the Baltic States (Baltic) and South Eastern Europe (SEE). The authors found that in the period of transition investor and creditor rights improved significantly across these countries. By 1998 the average level of LLSV's investor protection index for the transition countries was greater than the average for all legal origins other than that for common law jurisdictions, whilst the average for the creditor protection index was higher than for any of the civil law groupings or the common law countries. There were differences, however, within the transition

47 Ibid.

48 Pistor et al (n 41 above).

countries. Pistor et al[49] group the transition countries as follows: CEE/Baltic; SEE; CIS. They note that these groupings broadly correspond to legal orders before communism. The CEE/Baltic grouping had German civil law, while SEE states were typically part of the Ottoman Empire which was subject to French civil law influences, and the CIS countries 'failed to develop a modern formal legal system prior to the revolution'.[50] In the case of shareholders' rights, by 1998 the CEE/Baltic grouping and the CIS grouping scored higher on the LLSV index than all but the common law countries while the SEE grouping scored higher than both the French and German civil law groupings. With respect to creditor rights, the contrasts were even more dramatic. The CEE/Baltic grouping scored higher than any of the civil law groupings or the common law grouping while only the common law grouping had a higher score on the creditor protection index than either the CIS or SEE groupings. This suggests that, overall, the law on the books protecting investors and creditors in these transition countries had improved during the transition process. They were at least comparable to French and German civil law jurisdictions and in some cases reaching the level of Common Law jurisdictions.

When it comes to law in action (ie how well the legal system works as opposed to law on the books) the transition economies in Pistor et al's[51] study fared less well. Correlations between measures of rule of law, effectiveness and enforcement on the one hand and shareholder and creditor protection laws on the other were very low or negative. Stock market development (as measured by the average for 1997 and 1998 of ratio of market capitalisation to GDP) was found not to be influenced by investor protection laws but was influenced by the rule of law index. A similar result was found for creditor protection laws. However, in a dynamic specification for the determinants of the change between 1994 and 1998 in private sector lending, which included the distance from an income-related benchmark for lending as well as the initial level of creditor protection and the change from 1994 to 1998, both of these variables were found to be significant, but the rule of law was not. When the legal effectiveness variable of the European Bank for Reconstruction and Development[52] was substituted for the rule of law variable, it was found to be a statistically significant and positive determinant of the change in private sector lending, while the coefficients of the other variables were only marginally affected. The specifications used here suggest non-linearities in the effect of creditor

49 Ibid.

50 Ibid 337.

51 Ibid.

52 This is based on survey data reporting views on the effectiveness of reforms in bankruptcy and corporate law.

protection laws, but the variable measuring legal effectiveness is only entered as a level. Nor is the possibility of interaction between the effectiveness measure and the creditor protection measure tested.

The empirical evidence from the transplant literature clearly shows that the policy prescriptions implied in Legal Origin Theory may not be valid. Successfully transplanting legal rules from one legal order to another depends on the receptiveness of the recipient's legal culture. Whilst the evidence from the transition countries cited above is less strong than that from the more general study, this literature provides some support for Douglass North's conjecture that path dependence may reduce the benefits of transplanting institutions from developed to developing countries.

A NEW INSTITUTIONAL ECONOMICS MODEL OF FINANCIAL SECTOR DEVELOPMENT

Integrating the insights of NIE, the transplant effect and Schwartz's dimensional model of culture, Stephen has developed a model which identifies the role played by the law and the legal system in financial sector development and growth. Figure 3 summarises this model.

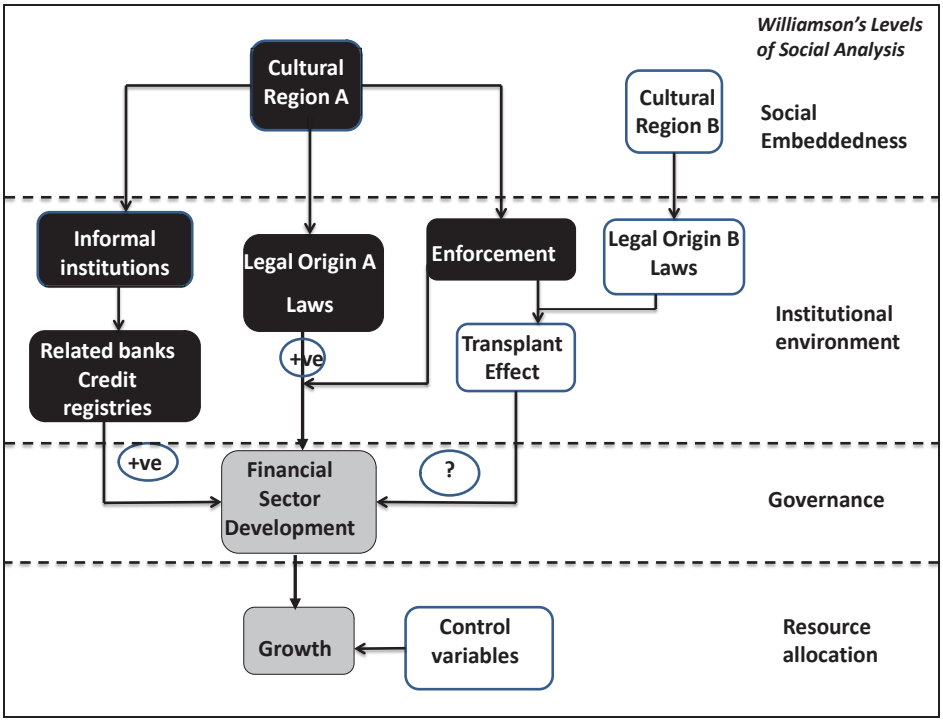

Figure 3: Schematic of the NIE framework applied to determinants of growth

The horizontal divisions in the figure correspond to the four levels of social analysis outlined by Williamson. At the top of the figure we see the culture of Region A is taken to be exogenously determined. At the next level laws, informal institutions and the enforcement characteristics of Cultural Region A constitute the institutional environment. Each of these constituent parts is constrained by the culture of Cultural Region A. The laws on the books are mediated into law in action by the enforcement characteristics to influence financial sector development. However, financial sector development is also influenced by informal institutions such as credit registries and close relations between banks and firms. Financial sector development mediates how exogenous characteristics of the jurisdiction are transformed into growth characteristics.

The figure accounts for legal transplants on the right of the figure in the form of laws derived from the culture of Cultural Region B being transplanted to Cultural Region A and interacting with the enforcement characteristics of Cultural Region A. For receptive transplants, the effect of this interaction on financial sector development will be positive, but in the case of unreceptive transplants it will be negative or at least lower than if it had been a receptive transplant. Laws on the books which are at odds with a jurisdiction's culture will be less effective than in other jurisdictions where they are in tune with the jurisdiction's culture.

The model sketched in Figure 3 has been applied to two separate datasets. Stephen[53] uses the financial dataset constructed by Levine and Zervos[54] together with the investor and creditor protection indices used in La Porta et al[55] and an enforcement variable[56] used by Levine and Zervos. The data consists of a cross-section of 39 countries for a single period. It includes legal origin countries and countries subject to receptive and unreceptive transplants. Whilst it does not include transition countries, it does include countries from a range of Schwartz's cultural regions as well as developed and developing countries. Whilst this first dataset uses unamended the creditor and investor protection indices employed in LLSV, the dataset used in Stephen et al[57] does not. It substitutes for these metrics those developed in the CBR Leximetric

53 Stephen (n 11 above) ch 6.

54 Ross Levine and Sara Zervos, 'Stock markets, banks and economic growth' (1998) 88(3) American Economic Review 537.

55 La Porta et al, 'Law and finance' (see n 10 above).

56 This is the average of the rule of law variable and the contract repudiation variable used by Stephen Knack and Philip Keefer, 'Institutions and economic performance: cross-country tests using alternative institutional measures' (1995) 7(3) Economics and Politics, 207.

57 Stephen et al (n 15 above).

data for investor and creditor protection, and it uses as its enforcement measure the rule of law index published by Daniel Kaufman and Aart Kraay.[58] The data analysed covers 30 jurisdictions for the period from 1996 to 2013. It is thus analysed using panel data methods. It includes legal origin countries, receptive and unreceptive transplants, transition countries and countries from all of Schwartz's cultural regions. Because of the time span covered, Stephen et al also take account of external shocks to the financial and regulatory systems, eg the end of the dotcom boom, the passing of the Sarbanes-Oxley Act in the US, the publication of *Doing Business* rankings and the financial crisis of 2008.

In both studies financial sector development is measured by the ratio of bank lending to the private sector to GDP (Bpy) and the ratio of capitalisation of the stock market to GDP (Mcap). Taken together they measure the size of the financial sector relative to the economy as a whole. Azfar and Matheson[59] have called their sum market mobilised capital. Both studies use a general to specific method under which the indices of investor and creditor protection are initially entered to allow for the possibility of non-linear relationships. This is similarly done for the enforcement measure and for interactions between each legal variable and the enforcement measure.

Size of financial sector

The estimates obtained in both studies cannot reject the hypothesis that the size of the financial sector is influenced by investor and creditor protection rules and the enforcement characteristics in a jurisdiction. The effect of high levels of creditor protection is greater for countries the higher their enforcement characteristics. For example, Stephen[60] reports that, while Egypt and South Korea have the same level of creditor protection index, an increase by one unit in the creditor protection index in Egypt is predicted to increase private credit by only 12.8 per cent but 21 per cent in South Korea. This is because the measure of enforcement in South Korea is 37 per cent higher than that in Egypt. However, the results of both studies suggest that the impact of an increase in investor protection on market capitalisation diminishes the higher the level of enforcement.

---

58 See Daniel Kaufmann, Aart Kraay and Massimo Mastruzzi, 'The Worldwide Governance Indicators: methodology and analytical issues' Policy Research Working Paper No 5430 (World Bank 2010).

59 Omar Azfar and Thornton Matheson, 'Market-mobilized capital' (2003) 117 Public Choice 357.

60 Stephen (n 11 above) 138.

Characteristics of legal environment

Stephen et al utilise the CBR Leximetric dataset to represent the legal environment.[61] The levels of the investor and creditor protection indices in the CBR Leximetric dataset converge across jurisdictions and cultural regions over time. The level of the investor protection index was higher in the English Speaking, South and South East Asian, Confucian (China) and Eastern European and Balkans (Russia) cultural regions than in the other cultural regions. In the period after the bursting of the dotcom bubble, this index rose in the Central European and Baltic States, South and South East Asian, Confucian and South American cultural regions. In the period corresponding to the passage of the Sarbanes-Oxley Act there was an increase in the Western European and Muslim Middle East and Sub-Saharan Africa cultural regions. Following the publication of the Dong Business rankings, the investor protection index rose in the Central Europe and Baltic States, China and the jurisdictions in the South American cultural region which had been unreceptive transplants.[62] The convergence of the shareholder protection index since the 1990s is illustrated in Figure 4.

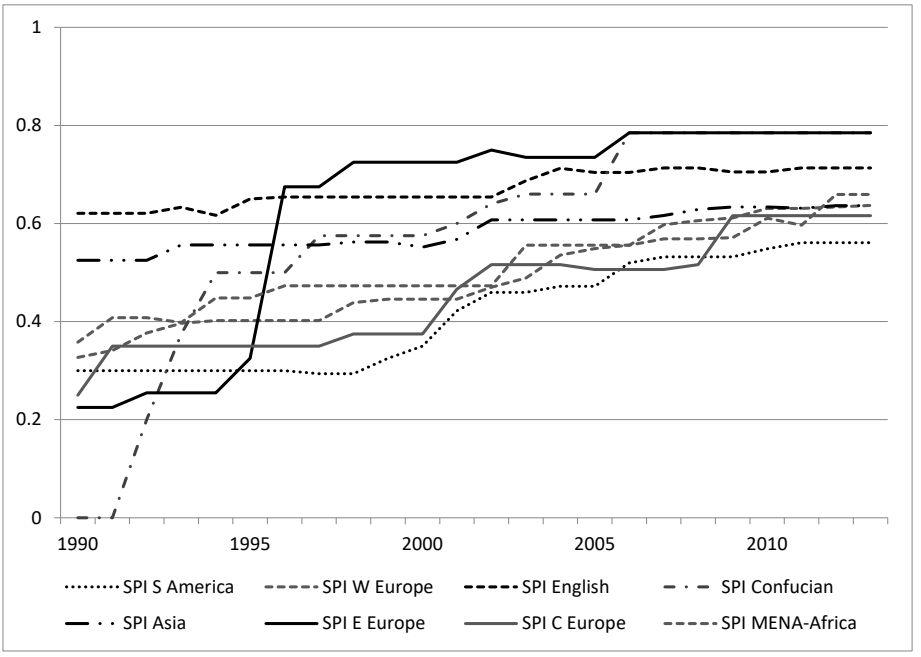

Figure 4: Shareholder protection index by cultural region. Source: CBR Leximetic data and Stephen et al.[63]

61 Stephen et al (n 15 above).
62 Brazil and Mexico.
63 Stephen et al (n 15 above).

Although there has been, in general, an increase in the creditor protection index, this has not led to the same degree of convergence as with the shareholder protection index. The estimation of the NIE model suggests that there were few statistically significant differences in the creditor protection index across cultural regions. In the first period, only Cyprus (the only common law jurisdiction in Western Europe), Russia and the two unreceptive jurisdictions in the South American Cultural Region differed from the overall average level of the creditor protection index. After the bursting of the dotcom bubble, this index rose for the Central European and Baltic States, Russia and the unreceptive jurisdictions of the South American Cultural Region while it fell for the non-common law jurisdiction in the South and South Eastern Asia Cultural Region (Japan). After the passage of the Sarbanes-Oxley Act, the index rose in the unreceptive transplant jurisdictions of western Europe (Cyprus and Spain) and the unreceptive transplant countries of south America (Brazil and Mexico). Following the publication of the *Doing Business* rankings, the index rose for the jurisdictions of the Western European Cultural Region, Central Europe and Baltic States and fell for the non-common law jurisdiction of the South and South East Asian Cultural Region (Japan). After the financial crisis, the only significant change for this index was an increase for China (the only jurisdiction in the dataset from the Confucian Cultural Region). The creditor protection index is illustrated for the cultural regions in Figure 5.

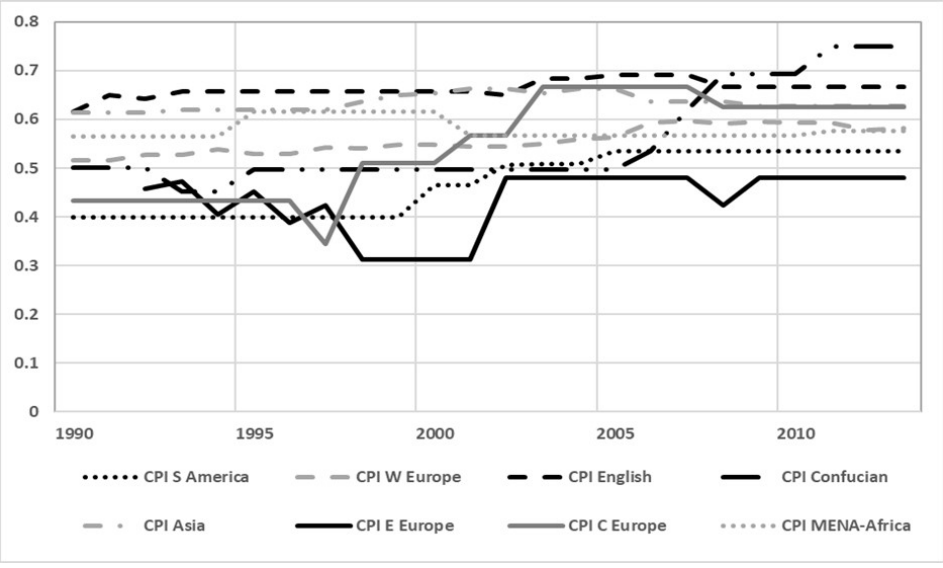

Figure 5: Creditor protection index by cultural region. Source: CBR Leximetric data and Stephen et al.[64]

64 Ibid.

The third element of the legal environment in the NEI model is what Stephen[65] calls enforcement: the confidence among economic agents in a jurisdiction as to the reliability of courts and the legal system. Stephen and Stephen et al[66] examine the extent to which levels of the index which they use for enforcement vary systematically across cultural regions. Stephen[67] finds that the only statistically different levels of enforcement are for the English Speaking, Western European and Confucian Cultural Regions. In these cultural regions the levels of enforcement are significantly higher than elsewhere. Stephen et al find a level of stability over the period covered in enforcement levels across cultural regions and groups of jurisdictions. They find that significant differences in level of enforcement exist between jurisdictions which were the unreceptive recipients of legal transplants in South America and elsewhere, the new transition jurisdictions of Russia and China and, finally, Argentina. These groups of jurisdictions have statistically lower levels of enforcement than on average. The unreceptive transplants of Western Europe, South East and South Asia and the Muslim Middle East and Sub-Saharan Africa have levels of enforcement which although significantly different from the average are not as low as those of the unreceptive transplants in the South American Cultural Region. With the exception of the result for Argentina, these results are strongly in line with the transplant effect. The relative stability of levels of enforcement is shown by the fact that the only statistical differences in the enforcement variable identified are: after the bursting of the dotcom bubble for the English Speaking, Western European, common law jurisdictions of South and South East Asia and for Argentina; and after the publication of the *Doing Business* rankings for Cyprus and the jurisdictions of the Central European and Baltic States Cultural Region which increased. The results obtained by Stephen et al suggest that the differences across jurisdiction in the measure of enforcement which they use are stable and deep-seated and only marginally affected by external shocks or policy changes. Given the differences in estimated values between jurisdictions which were subject to unresponsive transplants and those which are either origin or subject to receptive transplants, the evidence strongly supports the existence of a transplant effect.[68]

65 Stephen (n 11above).
66 Ibid and Stephen et al (n 15 above).
67 Stephen (n 11above) 143.
68 Stephen et al (n 15 above).

Legal Origin Theory

The data sets analysed by Stephen and Stephen et al[69] provide an opportunity to test the validity of Legal Origin Theory, namely that common law jurisdictions have more efficient legal systems than those of civil law jurisdictions. Whist all countries in the English Speaking Cultural Region are also common law jurisdictions and all countries in the Western European Cultural Region and the South American Cultural Region are civil law jurisdictions, in Stephen's dataset there are a number of common law jurisdictions which are not part of the English Speaking Cultural Region. These are Hong Kong (Confucian Cultural Region), Nigeria, Zimbabwe (Muslim Middle East and Sub-Saharan Africa), India, Pakistan, Malaysia, Singapore, Thailand (South and South East Asia) and Israel,[70] and in Stephen et al's dataset Cyprus (Western Europe), India, Malaysia, Pakistan (South and South East Asia) and South Africa (Muslim Middle East and Sub-Saharan Africa).[71] This variation in cultural region across the common law jurisdictions enables us to test whether being a common law jurisdiction has an effect beyond that of culture by distinguishing between common law jurisdictions and non-common law jurisdictions in the cultural regions where there are both.

Whilst Stephen finds that the level of the investor protection index for the common law jurisdictions of the English Speaking Cultural Region and that of the Common Law jurisdiction in the Confucian Cultural Region (Hong Kong) are statistically significantly higher than those in the Western European Cultural Region, that for the common law jurisdictions of South and South East Asia (India, Malaysia, Pakistan, Singapore and Thailand) is lower and not significantly different from the civil law jurisdictions from that cultural region (Indonesia, Japan and Philippines) included in the data. Similarly, the level of this index for the common law jurisdictions of the Muslim Middle East and Sub-Saharan Africa Cultural Region (South Africa and Zimbabwe) are not statistically different from the level for the civil law jurisdictions of that cultural region (Egypt and Turkey). In the case of the creditor protection index, the estimated level for the English Speaking Cultural Region (common law) is statistically significantly lower than that for the jurisdictions of South and South East Asia Cultural Region or the Confucian Cultural Region or the Muslim Middle East and Sub-

69 Stephen (n 11 above) and Stephen et al (n 15 above).

70 Stephen (n 11 above). In Schwartz's system, Israeli Jews are in the English-Speaking Cultural Region and Israeli Arabs in Muslim Middle East and Sub-Saharan Africa. In our econometric analysis, it is left unallocated to a cultural region.

71 Stephen et al (n 15 above).

Saharan Africa Cultural Region (in each of which there is no difference between common and civil law jurisdictions). In the case of the measure of enforcement, Stephen finds no statistical difference between the common law jurisdictions of the English Speaking Cultural Region (common law) and those of the Western Europe Cultural Region (civil law) which are both lower than for the Confucian Cultural Region which contains both common law and civil law jurisdictions. These are all higher than that for the South and South East Asian Cultural Region which contains both common law and civil law jurisdictions. The estimated value of the index for the common law jurisdictions in the Muslim Middle East and Sub-Saharan Africa jurisdiction is statistically below that for the civil law jurisdictions in that cultural region and those of all other cultural regions. Thus Stephen's results reject the strong version of Legal Origin Theory.[72]

The results obtained in Stephen et al go even further in refuting Legal Origin Theory. In the case of the shareholder protection index they find that while the estimated value for the jurisdictions of the English Speaking Cultural Region (common law) is statistically higher than that for the Western European Cultural Region (civil law with exception of Cyprus), it is significantly lower than the jurisdictions of South and South East Asian Cultural Region (common and civil law), China and Russia (both civil law). In the case of the creditor protection index, there is no difference between the estimated value for the English Speaking jurisdictions (common law) and the civil law jurisdictions of Western Europe or the jurisdictions of the South and South East Asian Cultural Region (including civil and common law jurisdictions) or the civil law jurisdiction of China. In the case of their measure of enforcement the dominant result (as reported above) is that enforcement levels in unreceptive transplants (regardless of whether civil or common law) are lower than those in origin and receptive transplant jurisdictions. Thus, the results on the legal environment found by Stephen et al reject the Legal Origin Theory.[73]

SUMMARY AND CONCLUSIONS

In this article we have considered a situation where an economic model has been applied to a legal policymaking context without any consideration of the insights gained from studying the historical process through which legal rules have been transplanted from one culture to another: Legal Origin Theory. We contrast the conclusions of Legal Origin Theory with those found using the NIE model developed

72 Stephen (n 11 above).
73 Stephen et al (n 15 above).

by Stephen[74] which not only builds on Williamson's[75] levels of social analysis but takes account of the transplant effect and Schwartz's cultural regions and uses the CBR Leximetric indices. The conclusions of Legal Origin Theory are rejected by the evidence adduced.

The empirical results discussed demonstrate that failure to take account of insights from other social sciences in the application of economic modelling can result in misguided policy advice. Not only do laws on the books matter but so too does their interaction with measures of legal effectiveness that influence financial development, as does the process by which laws are transplanted across jurisdictions and the accuracy by which researchers transform them into quantitative indices. These results should caution multilateral development agencies against policies which imply the transplant of legal rules from common law jurisdictions without taking account of the legal culture in the recipient jurisdiction.

74 Stephen (n 11 above).
75 Williamson (n 20 above).

Northern Ireland
Legal Quarterly
Winter Vol. 72 No. 4 (2021) 741–770
Article DOI: 10.53386/nilq.v72i4.909

Law, economy and legal consciousness at work

Ruth Dukes

Eleanor Kirk

University of Glasgow*
Correspondence email: ruth.dukes@glasgow.ac.uk

ABSTRACT

Building on earlier work, we state the case for an economic sociology of labour law which recognises and investigates the co-constitutive nature of law and the economy. Reviewing recent literature which shares this ambition, we argue that an important element of a co-constitutive theory of law and the economy is an understanding of the 'legal consciousness' of economic actors, meaning, in essence, their participation in the construction of legality or legalities, defined here as social structures which both enable and constrain actors. While a small number of studies have sought to understand the legal consciousness of workers, none that we are aware of has investigated the legal consciousness of human resource managers. This is a significant omission. Drawing on existing research in the field, we demonstrate the importance of human resource management (HRM) as a site where legalities can become bound up with other, especially market-focused and managerial, rationales, with significant consequences for compliance and enforcement. As a first step towards understanding the legal consciousness of human resource managers, we then situate HRM within a context of contradictory professional discourses and ideologies, and of processes of justification and legitimation of contemporary capitalism.

Keywords: legal consciousness; labour law; economic sociology; socio-legal.

INTRODUCTION

Scholars of labour law have traditionally been guided in their research by a concern to understand the effects of the law on real people.[1] Indeed, in the formative period of labour law scholarship, in

* School of Law, University of Glasgow. This project received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No 757395). We are grateful to the following for constructive comments and criticisms: Nicole Busby, Emily Rose, Alessio Bertolini, Gregoris Ioannou, Ou Lin and two anonymous referees.

1 K W Wedderburn, *The Worker and the Law* 3rd edn (Pelican 1983) 860.

the early and middle decades of the twentieth century, it was almost characteristic of the field that doctrinal analysis should be combined with sociological methods aimed at understanding not only the law in books but also the law in action.[2] When empirical study uncovered the limited reach of formal law – statutory and judge-made rules – in respect of the regulation of working relations, scholars widened their focus to include, in addition, the social norms that governed those relations and the day-to-day organisation of work. The contract of employment, it was noted, was technically speaking the key legal institution in the field; in substance, however, it was little more than an empty shell – a bare agreement to work in exchange for wages.[3] The rules that mattered were found, for the most part, not in the contract, in legislation or the common law, but rather in collective agreements, custom and practice, and the rule-books of workplaces and trade unions.[4]

In recent years, we have witnessed the beginnings of a new flourishing of socio-legal scholarship in the field of labour law, involving the utilisation of a range of sociological, ethnographic and socio-economic methods to shed light on the application and enforcement of the law in a range of settings.[5] In contrast to the largely collectivised field analysed by Otto Kahn-Freund and others in the twentieth century, employment relations today are shaped by the weakening and sidelining of trade unions and collective bargaining and by ongoing processes of juridification and human-resource-managerialisation. In place of the more or less unitary labour constitutions of the post-war decades, the organisation of work and working relations is highly 'fissured', with employing organisations making ever greater use – in the interests of maximising flexibility and cutting costs – of a variety of casual and commercial contractual forms in preference to contracts of employment.[6] In policymaking circles and in firms, neoclassical economic thinking about working relations is dominant, together with the associated characterisation of labour laws as 'red-tape': unhelpful limitations on actors' freedom of action.

Among the various empirical methods and framings adopted by scholars in an effort to make sense of these trends, a particularly promising, but as yet underdeveloped, line of research focuses on

2 R Pound, 'Law in books and law in action' (1910) 44 American Law Review 12.

3 O Kahn-Freund, 'Legal framework' in A Flanders and H Clegg (eds), T*he System of Industrial Relations in Great Britain* (Blackwell 1954).

4 H Arthurs, 'Understanding labour law: the debate over "industrial pluralism"' (1985) 38 Current Legal Problems 83.

5 Eg A Ludlow and A Blackham (eds), *New Frontiers in Empirical Labour Law Research* (Hart 2015).

6 D Weil, *The Fissured Workplace* (Harvard University Press 2017).

the *legal consciousness* of actors.[7] Having grown out of critical legal studies of hegemonic legal narratives or rationales as expressed, especially, in the legal consciousness of members of the judiciary,[8] legal consciousness research (LCR) today focuses on laypeople's routine experiences and perceptions of law in everyday life. 'Legality' is defined here as a social structure of meaning and normativity and 'legal consciousness' as actors' participation in the ongoing production and reproduction of that social structure.[9] In the field of labour law, one recent study has focused on the legal consciousness of care workers and another on the legal consciousness of workers involved in disputes concerning their employment rights.[10]

In what follows, we consider the potentially much greater contribution that LCR could make to the study of labour law today. In doing so, we build on earlier work, which argued for an *economic sociology of labour law*, or ESLL, that would recover the tradition of socio-legal research in the field in a manner that allowed for account to be taken too of the increasingly prominent individualistic and commercial aspects of working relations.[11] The promise of an ESLL, as we explain in part one, is that it neither 'over-sociologises' the study of law and the economy,[12] nor encourages the adoption of overly reductive conceptions of social action as 'rationally economic',[13] but instead treats law and the economy as two aspects of social reality, applying sociological approaches, concepts and methods to the two fields and to instances of their interaction.[14] LCR complements this approach, as we explain in the second part of this article, helping to transcend

7 E Kirk, 'Legal Consciousness and the sociology of labour law' (2021) 50(3) Industrial Law Journal 405–433.

8 K Klare, 'Judicial deradicalization of the Wagner Act and the origins of modern legal consciousness, 1937–1941' (1978) 62 Minnesota Law Review 265.

9 P Ewick and S Silbey, *The Common Place of Law: Stories from Everyday Life* (Chicago University Press 1998).

10 On care workers, see L Hayes, *Stories of Care: a Labour of Law* (Palgrave 2017). On disputes, see E Kirk, 'The "Problem" with the Employment Tribunal system: reform, rhetoric and realities for the clients of Citizens' Advice Bureaux' (2018) 32(6) Work, Employment and Society 975–991; N Busby and M McDermont, 'Fighting with the wind: claimants' experiences and perceptions of the Employment Tribunal' (2019) 49(2) Industrial Law Journal 159–198.

11 R Dukes, 'The economic sociology of labour law' (2019) 46 Journal of Law and Society 396.

12 M Harvey, 'Productive systems, markets and competition as "instituted economic process"' in B Burchell, S Deakin, J Michie and J Rubery (eds), *Systems of Production: Markets, Organisations and Performance* (Routledge 2003).

13 F Block, *Capitalism: the Future of an Illusion* (University of California Press 2018).

14 S Frerichs, 'Studying law, economy, and society: a short history of socio-legal thinking' (2012) Helsinki Legal Studies Research Paper No 19.

conceptual gaps between the micro and the macro, and between agency and structure. In part three, we argue that the legal consciousness of human resource (HR) professionals is of particular interest to scholars of labour law, pointing here to the central role that the profession plays in implementing, translating, textualising and encoding law. We demonstrate how an investigation of the legal consciousness of HR professionals could aid understanding of the manner in which legal rationales can become bound up with other, especially, market-focused and managerial rationales: how law can become 'managerialised',[15] and in the process, as Barmes put it, lose its normative integrity.[16] Such managerialisation of the law has significant implications for questions of compliance and law enforcement. From the point of view of the researcher, however, getting at the legal consciousness of an individual or group of individuals is a notoriously difficult task, which typically involves semi-structured interviews carried out over a period of several hours. With such a programme of research in mind, we lastly take the preliminary step of situating HRM within a context of contradictory professional discourses and ideologies, and of processes of justification and legitimation of contemporary capitalism.[17]

THE ECONOMIC SOCIOLOGY OF LABOUR LAW

When legal scholars first conceived of labour law as a distinct branch of the law, around the beginning of the twentieth century, they characterised it in contradistinction to private law or economic law as *social law*, intending this characterisation to have both descriptive and normative force.[18] In substance, the field encompassed all legal rules regulating relations between workers and employers and their respective representatives (trade unions, works councils, employers' associations). According to critical scholars, such as Hugo Sinzheimer, the overarching aim of these rules was argued to lie with the decommodification of labour and the decommercialisation of employment relations.[19] By recognising and guaranteeing the role

15 L Edelman, *Working Law* (Chicago University Press 2016).

16 L Barmes, *Bullying and Behavioural Conflict at Work: The Duality of Individual Rights* (Oxford University Press 2015).

17 In her article – 'Law and legalities at work: HR practitioners as quasi-legal professionals' (2021) 50(4) Industrial Law Journal 583–609 – Eleanor Kirk draws on interviews, observation and discourse analysis, to present rich qualitative data on the legal consciousness of HR professionals. In doing so, she builds explicitly on the extended discussion of conceptual and methodological issues contained in this paper.

18 This part of the paper draws on Dukes (n 11 above).

19 H Sinzheimer, *Grundzüge des Arbeitsrechts* 2nd edn (Verlag von Gustav Fischer 1927).

of labour in the regulation, or 'ordering', of the economy, labour law sought to emancipate workers from their relation of subordination to employers, rendering them not only free from employer efforts to dictate the social and economic conditions of their existence, but free, too, to participate in the formation of those conditions. Accordingly, scholars focused their attentions on those laws that were intended to facilitate and encourage the emergence and 'peaceful' functioning of collective systems of rulemaking and dispute resolution. The individual contractual and market aspects (*Preiskampf, Konkurrenzkampf*)[20] of the employment relation were treated as having been largely suppressed by the collective and the social.

In the decades of political consensus that followed the end of the Second World War, labour law was defined again in contradistinction to private law, but now commonly as the body of law which addressed the imbalance of power in the employment relation.[21] A central weakness of the approach, and one which became increasingly obvious as consensus frayed, was its failure to take adequate account of economic change – encompassing developments and variations in the organisation of production – as a driver of social and legal change. With the beginnings of deindustrialisation, the growth of services and the feminisation of the formally employed workforce, the post-war framing of labour law became increasingly outdated, still tied to a static Fordist model of employment – or 'industrial' – relations, and a corresponding notion of the ostensibly 'standard' employment model. As governments of the centre left as well as the centre right embraced neoclassical economic precepts regarding the desirability of free markets and flexible businesses, scholars developed novel ways of framing their research that focused no longer on trade unions and collective bargaining but instead on the contract of employment and the labour market. It became increasingly common, as the decades wore on, to think of the subject not as labour law but as *labour market regulation*.[22]

In recent years, a small but growing number of researchers have looked to economic sociology and the economic sociology of law as offering an approach or set of approaches that might allow for adequate account to be taken of the social and legal, as well as the individual and

20 M Weber, *Economy and Society* (University of California Press 1978) 92, 108.

21 P Davies and M Freedland (eds), *Kahn-Freund's Labour and the Law* 3rd edn (Stevens 1983) 18.

22 For discussion, see R Dukes, *The Labour Constitution: The Enduring Idea of Labour Law* (Oxford University Press 2014) ch 5.

economic aspects of employment relations.[23] Labour market framings, it has been argued, could tend to highlight economic motives and rationalities over others, focusing the researcher's gaze on the initial, transactional element of the working relation and underemphasising the importance of daily lived experience.[24] They could obscure the existence of deep-seated conflicts of interest and the inherently political nature of law, suggesting instead that policy- and law-making are essentially technical exercises, best left to the experts.[25] Drawing on the work of Max Weber, one of the authors of this article has argued instead for an ESLL that combines political economy framings with a sociological analysis of employment relations, defining these as at once economic, legal and social relations.[26] Law figures here as essentially contested, both politically in the sphere of policymaking and legislation, and socially by the lay actors whose behaviour is on the one hand 'oriented to the law',[27] and who, on the other, reconstruct juridical rules in their daily lives as 'maxims of action'.[28] Law is not a simple external constraint on (economic) social action, in other words, but is internal to situated behaviour and social interactions. How people think about work and about labour law can be shaped by different rationales or logics; for example, workers might understand themselves to be motivated by a wish to maximise their income, or alternatively, to earn just enough to support themselves, their dependants and their existing way of life.[29] From the point of view of the researcher, lay conceptions, shared beliefs, dominant rationales and social norms are all recognised as centrally important to an empirical understanding of law.[30]

Dukes' ESLL is constructed around a primary focus on the key legal institution of the contract for work.[31] With Weber, the act of

23 Eg N Zatz, 'Prison labor and the paradox of paid nonmarket work' in N Bandelj (ed), *Economic Sociology of Work* (Emerald 2009); M Coutu and T Kirat, 'John R Commons and Max Weber: the foundations of an economic sociology of law' (2011) 38(4) Journal of Law and Society 469–495, n 469; K Rittich, 'Making natural markets: flexibility as labour market truth' 65(3) Northern Ireland Legal Quarterly 323; D Ashiagbor, 'Theorising the relationship between social law and markets in regional integration projects' (2018) 27 Social and Legal Studies 435.

24 Dukes (n 22 above) chs 5 and 8.

25 Ibid; D Massey, 'Vocabularies of the economy' in S Hall, D Massey and M Rusting (eds), *After Neoliberalism?* (Soundings 2013).

26 Dukes (n 11 above).

27 Weber (n 20 above) 33.

28 M Weber, *Critique of Stammler* (Free Press [1905] 1977).

29 M Weber, *The Protestant Work Ethic and the Spirit of Capitalism* (Charles Scribner's Sons 1930).

30 R Dukes and W Streeck, 'Labour constitutions and occupational communities: social norms and legal norms at work' (2020) 47(4) Journal of Law and Society 612–38.

31 Dukes (n 11 above).

contracting for work is understood as *economic social action that is oriented to the legal order*. Contracting does not end with a one-off offer and acceptance of terms, it is emphasised, but rather continues to occur as the contractual framing of the work-for-payment bargain changes over time. As an aid to analysing the conditions under which contracting for work proceeds, Dukes' ESLL looks to Weber's notion of the *labour constitution* – the historically given ensemble of rules, institutions, social statuses, economic and technological conditions, which together shape decision-making in respect of the question who gets what work under which terms and conditions.[32] It proposes that the labour constitution be used as a heuristic to map the various contexts, or regulated spaces, within which contracting takes place. This would allow for comparisons to be drawn between different workplaces, sectors, jurisdictions and between different points in time, in a manner that might aid the construction of hypotheses or the drawing of conclusions regarding the influence of particular laws and institutions on contracting behaviour. It would provide a means of moving beyond the micro level to the meso and macro levels of analysis, without defaulting automatically to 'the labour market' – and all which that might imply or obscure – as that which frames the field. As such, Dukes' ESLL could be helpful to scholars and policymakers alike in assessing the significance of particular labour market institutions to the achievement of policy goals, including but by no means limited to economic flexibility and growth.

An example of what is envisaged here can be found in Eric Tucker's work on the Uber model of taxi provision.[33] Seeking to place Uber in historical perspective, Tucker develops a stylised history of what he calls the 'taxi capitalisms' of twentieth-century Toronto, from a largely unregulated sector, through various iterations of a medallion-, or permit-based, system, to the appearance most recently of Uber. In sketching these successive 'capitalisms' – or labour constitutions – Tucker's intention is to develop a heuristic that will allow him to identify the consequences for workers of changes to the regulation of the taxi sector, and to the business models adopted by enterprises in that sector, including the preferred form of (contractual) relationship with drivers. Particular attention is paid to the questions of how value

32 See especially M Weber, *Verhältnisse der Landarbeiter im ostelbischen Deutschland* (1892); M Weber 'Entwickelungstendenzen in der Lage der ostelbischen Landarbeiter' (1894) 77 Preussische Jahrbücher reprinted in M Weber, *Gesammelte Aufsätze zur Sozial- und Wirtschaftsgeschichte* (Mohr 1924) 498; discussed in Dukes and Streeck (n 30 above).

33 E Tucker, 'Uber and the making and unmaking of taxi capitalisms' in D McKee, F Makela and T Scassa (eds), *Law and the 'Sharing Economy': Regulating Online Market Platforms* (University of Ottawa Press 2019).

was abstracted, or profits made, at specific points in time, and how business models and working relations ('social relations of production') were adapted in the light of new technologies, new rules, and changing levels of competition. A second point of focus lies with the changing opportunities for those creating value – the drivers – to collectivise and to fight for the right to a greater share of the farebox income. In order to fulfil the ambitions of an ESLL, Tucker's sketch of labour constitutions could usefully be supplemented with analysis of the meaning which the contractual relations have for individual drivers and brokers, or drivers and medallion owners. (Does the driver understand himself to be contracting for work? Does he understand himself therefore to be owed a minimum wage and other employment rights? Alternatively, does she regard herself as truly self-employed? Which aspects of her working relationship does she object to and why? And so on.) The question would then arise whether these understandings had led to the emergence of particular practices or social norms; whether they had resulted in collective action, or in collective lobbying or strategic litigation in an effort to effect legal change.

A second example of what we have in mind when we speak of ESLL can be found in Lydia Hayes' 2017 book, *Stories of Care*.[34] Here, Hayes describes and analyses three sectoral labour constitutions which together chart the chronological progression in the care sector in England from a welfare state, citizenship model of care provision to a fully marketised one. In the first, local authorities are under a statutory duty to provide care for those in need of it, which they fulfil by employing care workers directly; in the second, the provision of care is outsourced by local authorities to private companies; in the third, individuals bear responsibility for purchasing their own care and the statutory duty of local authorities is reduced to an obligation to make individualised cash payments to service-users. With the aim of analysing the three labour constitutions and understanding the consequences – for workers, service-users and society as a whole – of the progression from one to the next, Hayes develops a method which juxtaposes what she calls 'character narratives' with detailed analysis of the policy, legislation and case law relating to particular elements of care work and the terms and conditions of care workers. Each character narrative is compiled from the responses of multiple interviewees and, though presented as a single, coherent 'story', or report, is intended to communicate particular aspects of the *common* experiences of care workers and their *common* attempts to make sense of those experiences.[35] Out of several individual experiences, in Hayes' terms, these 'imaginative devices' are used to present a 'collective body

34 Hayes (n 10 above).
35 Ibid 21–24.

of knowledge':[36] richly detailed descriptions of how it is to care for a living.[37] Proceeding from a recognition of the co-constitutive nature of law and social reality – 'law at work is ... intertwined with the materiality of paid caregiving' – Hayes seeks to uncover how social assumptions about care and care workers, about social class and gender, shape (formal) law. At the same time, she is equally concerned to understand how legislation and judicial decisions shape discourses which reinforce, or challenge, these social assumptions and workers' own perceptions of their jobs and working relations.[38]

> Legal thinking and experiential existence are mutually reinforcing; law and legal concepts shape the circumstances and situations in which paid care is produced. Homecare workers are conceptually located where the very fabric of legal ideas about employment begins to fray. However, 'being' a homecare worker is central to notions of personal identity and to understandings of the value and purpose of labour, community routines and the organisation of time. It is in the imbrications of law and experience – the overlapping, collisions and enfolding – that marginality attains its material construction.[39]

In her analysis of policy, legislation and case law, Hayes proceeds by identifying the dominant narratives or rationalities surrounding care work.[40] Historically, she points out, economic rationales – including the core notion that work is sold by care workers in return for a wage – have been obscured in the law by narratives that foreground maternal nurture and female altruism: care is women's work, akin to mothering; it is owed by women to their families and even, perhaps, to their friends and neighbours. Today, echoes of such reasoning can be found in judicial decision-making concerning the right of care workers to a minimum wage, which taken as a whole tends to suggest that courts and tribunals regard unpaid labour as a component of care work; the cost of caregiving as one that should be borne, at least in part, by the working-class women who provide the care.[41] They can be found, too, in the pronouncements of politicians, who characterise care as something that should be provided 'within the family' and not by the state: in other words, by women, for free.[42] In the most recent, third-sectoral labour constitution, economic rationales are emphasised rather than obscured in the legislation, as the imperative to create a market in care (so as to furnish individual care-users with *choice*) casts workers in the

36 Ibid 24.
37 Ibid 1.
38 Ibid 4–5.
39 Ibid 11.
40 Ibid 11.
41 Ibid 135–152.
42 Ibid 202.

role of entrepreneurs.[43] What the dominant legal discourse masks, in this case, is the manner in which the construction of a market in care can render conflictual both the relations between workers and those for whom they care, and the relations among workers. Service-users have an interest in negotiating as low an hourly rate as possible so as to eke out their individual care allowance; they may prefer the care to be delivered at different times throughout the day, adding to care workers' travelling time; their care needs might conflict with the workers' needs for breaks, holidays and sick leave. In a bid to secure sufficient hours' work in a week, and to extract a promise of future hours in weeks to come, meanwhile, workers may compete with each other on the basis of their willingness to work for wages below the legal minimum, to forego protections of their health and safety at work, and to undertake some tasks for no pay at all.[44] Whether the economic nature of the working relationship is obscured or emphasised in the law, then, wages and working conditions for the care workers remain singularly poor.

Throughout her book, Hayes' concern to understand the workers' own perceptions of care work is much in evidence: to treat them, as she says, not as the objects of legal regulation but as 'the participative and experiencing subjects of law at work'.[45] Through her character narratives, she reveals how the rationales dominant in the law and in media portrayals of care are internalised, or partly internalised, by the women, who come to view themselves as 'cheap nurses', as maternal nurturers, or as entrepreneurs. Sometimes the women voice prevailing narratives, sometimes they resist them, sometimes they do both, almost in the same breath.[46] A key term for Hayes is 'institutional humiliation', used by her to refer to the lack of respect afforded by the state to care workers as a collective group; to the workers' own recognition of being unjustly treated as a group; and to the lived reality of economic and social detriment.[47] She notes the workers' belief that they are low paid; that their training and skills are not recognised in their rate of pay;[48] that this can be explained, at least in part, by the devaluing of female labour generally and homecare in particular.[49] In this way, Hayes deals creatively and highly effectively with questions concerning the law and the legal consciousness of a group of actors who do not necessarily think of their working relations in legal terms. It is not her intention in this volume to address questions of unionisation

43 Ibid ch 4.
44 Ibid 164.
45 Ibid 3.
46 Ibid 22.
47 Ibid 4.
48 Ibid 48, 49.
49 Ibid 37–38.

or coordinated campaigns for better terms and conditions or changes to the law. Nor does she provide detailed descriptions or analyses of workers' experiences in challenging employers or taking legal claims to employment tribunals.[50] Such ideas, activities and activism, but also their lack, are vital to a full appreciation of legal consciousness, and constitute a central element of an ESLL. We believe it is important to open up and develop the conceptual resources associated with both.

LEGAL CONSCIOUSNESS AND ESLL

Dukes' ESLL is interpretive in orientation, focused in the first instance on the act of contracting for work and the actors' own understandings of their contracting behaviour, and seeking thereafter to address the question of how that behaviour is shaped by the particular labour constitution(s) within which contracting takes place. It seeks to provide a framing for an empirical analysis of the law, moving beyond Pound's distinction between the 'law in books' and the 'law in action' to uncover the normative arrangements that govern everyday socio-economic life.[51] It is concerned, therefore, with how actors either reproduce or transform their socio-economic realities, with how they internalise or reject legal-economic rationales and ideologies, and with how such internalisation or rejection can serve to neutralise or embolden workplace and legal and political resistance.[52]

Legal consciousness is a concept that can assist with this task, in particular by transcending conceptual gaps between the micro and the macro, and between agency and structure, that might otherwise risk being reinforced by the notion of *contracting for work* within a *labour constitution*. As we have seen, the term 'legal consciousness' is used quite specifically by those engaging in LCR to mean participation in the process of constructing legality, with legality understood as a structural component of society – participation, therefore, in the construction of economic and other social relations.[53] Importantly, then, legality figures here as an emergent feature of everyday life rather than an

50 Ibid 179–183.

51 M Krygier, *Philip Selznick: Ideals in the World* (Stanford University Press 2012) 141, citing Pound (n 2 above) and E Ehrlich, *Fundamental Principles of the Sociology of Law* (Harvard University Press 1936). For a recent discussion of Ehrlich in the context of labour law, see E Rose 'Reinterpreting law's silence: examining the interconnections between legal doctrine and the rise of immaterial labour' (2020) 47(4) Journal of Law and Society 588–611.

52 M Archer, *Realist Social Theory: The Morphogenetic Approach* (Cambridge University Press 1995).

53 Ewick and Silbey (n 9 above).

'external apparatus acting upon social life'.[54] More concretely, legality embraces 'meanings, sources of authority, and cultural practices that are commonly recognised as legal, regardless of who employs them or for what ends'.[55] The primary focus is on society rather than law *per se*, implying a critique of alternative, 'law first' approaches that seek to track causal relations between law, on the one hand, and society on the other.[56]

LCR concerns the question of how figments of law are interwoven into worldviews, and into our very social fabric. In line with its methodological commitment to researching the meaning of social action from the perspective of lay actors, it seeks to honour those actors' own conceptions of law, embracing legal pluralism and defining law broadly to include state law and multifarious forms of non-state law, from the more formalised realms of policies and procedures to more informal customs and practices and otherwise authoritative norms.[57] In LCR, law is recognised to perform an ideological function, and legal ideologies, containing clusters of discursive elements which may operate at a distance from doctrinal discourses, to contribute to socio-economic reproduction.[58] Notwithstanding the term legal *consciousness*, LCR recognises that most people rarely reflect upon, or become fully aware of, the ways in which their behaviour is legal, and therefore how they contribute to the reproduction of legalities in their everyday lives. Instead, people mostly take for granted the structures of legality within their lives, and legal ideologies form an unconscious though constituent and constitutive element of their lived-relations.[59] LCR therefore raises the question of legal domination, the lived experience of which 'consists largely in a series of unreflective actions'.[60] It rejects simplistic notions of false consciousness, seeking instead, and attempting to understand, the complexities of legal consciousness in the perceptions and actions of humans as knowledgeable agents.

---

54 Ibid 17.

55 Ibid 22.

56 D Cowan, 'Legal consciousness: some observations' (2004) 67(6) Modern law Review 928, 929.

57 S Halliday, 'After hegemony? The varieties of legal consciousness research' (2019) 28(6) Social and Legal Studies 859, 863.

58 A Hunt, *Explorations in Law and Society: Towards a Constitutive Theory of Law* (Routledge 1993) 7, 148.

59 L Althusser, *On the Reproduction of Capitalism: Ideology and Ideological State Apparatuses* (Verso [1971] 2014). Ewick and Silbey (n 9 above) 15.

60 Douglas Litowitz, 'Gramsci, hegemony, and the law' (2000) 2(1) Brigham Young University Law Review 515, 541.

Legal consciousness, it is recognised, may be 'complex, fragmentary and contradictory'.[61]

The concept of legal consciousness has been utilised in a variety of ways by different scholars.[62] In this article, we are primarily concerned with the critical tradition in LCR,[63] while also taking account of some recent critiques of that tradition.[64] Drawing on critical legal studies and legal realism, the critical tradition was born from a concern to explain why people tend to display considerable trust in legal institutions, despite what appear to be 'consistent distinctions between ideal and reality, law on the books and law in action, abstract formal equality and substantive, concrete material inequality'.[65] Addressing this puzzle in their seminal study of *The Common Place of Law*, Ewick and Silbey outlined three predominant 'metastories' found within popular consciousness, which express contradictions in the ideals of law, how it is engaged, experienced and resisted by laypeople.[66] These 'metastories' are interpretive frames which, 'represent and shape how people experience legality'.[67] People draw from these frames to form 'a picture of how the law works', invoking different sets of 'normative claims, justifications, and values to express how the law ought to function'.[68] The metastories involve, firstly, reverence to the law and legal system conceived as transcendent, impartial and magisterial ('before the law'). Secondly, they involve a conception of law as a game in which winners and losers deploy skill, strategies and tactics to win, as they play 'with the law'. The third metastory takes a critical view of law or the legal system as oppressive, unfair and often discriminatory: here people find themselves to be 'against the law'. Individuals may have a predominant experience of some legal phenomenon, such as a brush with the criminal justice system in which they find themselves pitted against it, or positively disposed to the legitimacy of strong institutions in the name of 'law and order'. People may identify with and express more than one metastory at once, however, often drawing

61 Halliday (n 57 above) 863, citing A Hall, *Cultural Studies 1983* (Duke University Press 2016) 167.

62 Halliday (n 57 above) at 859; L J Chua and D M Engel, 'Legal Consciousness Reconsidered.' (2019) 15 Annual Review of Law and Social Science 335–353.

63 Eg Ewick and Silbey (n 9 above).

64 Eg M Hertogh, *Nobody's Law: Legal Consciousness and Legal Alienation in Everyday Life* (Palgrave Macmillan 2018).

65 S Silbey, 'After legal consciousness' (2005) 1 Annual Review of Law and Social Science 323, 326.

66 Ewick and Silbey (n 9 above).

67 P Ewick and S Silbey, 'Common knowledge and ideological critique: the significance of knowing that the "haves" come out ahead' (1999) 33 Law and Society Review 1025, 1028.

68 Ibid 1027–1028.

on all three within the same breath. For example, they might uphold the ideal of a transcendent 'law', while being critical of one or even all judges' capriciousness, or of lawyers as tricksters. Complexity and contradiction are what affords law its ideological hegemony. To paraphrase Susan Silbey, if law were experienced as solely god or solely gimmick, it would be fragile and prone to collapse.[69] Instead, it holds a continual promise of reform and betterment.

While LCR constitutes a growing field of scholarship in North America,[70] it has received relatively scant attention in the United Kingdom (UK);[71] nor has it been much employed by scholars of labour law and the sociology of work.[72] Hayes' research, reviewed above, stands out as offering a recent analysis of the legal characterisations of care workers and their place in the world, as experienced and partially constituted by the workers themselves.[73] While she cites Ewick and Silbey in the course of her analysis, however, Hayes does not refer explicitly to the legal consciousness of those workers.

Only one recent labour law study that we are aware of frames its analytical approach expressly in terms of legal consciousness, namely an investigation of *Citizens Advice and Employment Disputes* led by Nicole Busby and Morag McDermont (CAB-EMP).[74] Tracking the experience of workers over the course of sometimes long-lasting employment disputes, the study investigated advice agencies specifically as new sites of legal consciousness. Outputs highlighted the nature of the barriers faced by individuals attempting to navigate the employment tribunal system; barriers that were especially difficult to overcome for those with little access to either a trade union or a solicitor. While workers' knowledge of the detail of their legal rights tended to be quite vague, they also had, in the main, a deeply held confidence in the law and its capacity to protect against ill or unfair treatment. Contradicting dominant policy discourses that characterise many litigants as 'vexatious', however, the study also unearthed the – sometimes extreme – reluctance of workers to raise or continue pursuing claims, fearing legal complexity and formality, having to face former

69 Silbey (n 65 above).

70 Chua and Engel (n 62 above).

71 Cowan (n 56).

72 Kirk (n 7 above). There are a handful of North American studies of legal consciousness at work, but most focus on quite specific aspects of working life such as sexual harassment rather than the wider labour constitution. See, for example, A M Marshall, 'Idle rights: employees' rights consciousness and the construction of sexual harassment policies' (2005) 39 Law and Society Review 83; and A Blackstone, C Uggen and H McLoughlin (2009) 43(3) 'Legal consciousness and responses to sexual harassment' Law and Society Review 631–668.

73 Hayes (n 10 above).

74 Busby and McDermont (n 10 above).

employers, or doubting that they would receive justice.[75] Additionally, researchers traced the role of policy discourses and political rhetoric in shaping workers' thoughts about their disputes and what right they had to pursue them. Many a would-be claimant was buffeted by the stigma of being deemed a 'nuisance litigant',[76] or discouraged more directly by the idea of costs to the tax-payer or employer.[77] The findings thus problematised a straightforward narrative of a growing legal-mindedness or litigiousness within society that has dominated policy discussions, demonstrating instead the complexity of workers' understandings of their employment rights and entitlements.

The CAB-EMP research well demonstrates the potential of LCR in the field of labour law and employment relations: its capacity to shed light on how law and associated (economic) social structures relate to and shape people's working lives. While legal consciousness operates in a particularly condensed fashion within formalised settings like courts or tribunals, 'in the same way economic phenomena are associated with stock exchanges or factories'[78] – questions of legal consciousness also arise much more frequently in the course of everyday life. Structures of legality are both more mundane and more pervasive, and hence more powerful, than a focus on legal disputes and law enforcement would suggest.[79] LCR is particularly well suited to helping us to understand the ways in which laypeople enact and interact with labour law, legal norms and discourses, moving beyond the more obviously legal means by which people respond to a sense of injustice – for example, litigation – but also beyond conscious attempts to draw upon positive law or even rights discourses: to engage, as Colling puts it, in 'legal mobilisation'.[80] That said, the further we move from the more obvious ways in which people invoke notions of justice, the more methodologically and analytically tricky it becomes to investigate this when law can be far from people's conscious or explicit thoughts. This realm in which structures are (re)produced and hence socio-economic relations are ordered requires detailed, ethnographic study, painstakingly reconstructing the place and significance of law in the lives of laypeople.

---

75 Kirk (n 17 above).

76 Ibid.

77 E Rose and N Busby, 'Power in employment disputes' (2017) 44 Journal of Law and Society 674.

78 Hunt (n 5 above) 329.

79 Ibid.

80 T Colling, 'Court in a trap? Legal mobilisation by trade unions in the United Kingdom' Warwick Papers in Industrial Relations (Warwick Business School 2009).

To date, LCR in the field of labour law and employment relations has focused mostly on *workers*' legal consciousness with much less attention paid to employer perspectives. More specifically, the focus has lain with consciousness relating to employment (protective) rights and breaches of those rights, for example, employers' failure to pay the minimum wage. LCR has not been directed at the more diffuse creation among workers and wider society of a sense of what is legal, or just, or appropriate in any given situation, in terms of an offer of work, wage-setting, the drafting of contracts, policies or procedures or broader organisational design. The focus on workers may reflect a wider tendency in LCR to give voice to the 'have-nots' in society, typically at a further remove from legal knowledge, processes and power.[81] With regard to the reproduction of legality at work today, however, HR professionals are often the key players, having largely replaced trade unions as chiefly responsible for 'bridging' the law,[82] and mediating its progress into workplaces.[83] Workers themselves tend to know little about their legal rights at work, how to apply and enforce the law.[84] Available research suggests that, when seeking information about the legality of their contract, correct payments and so on, they often turn, at least initially to their employer, or HR department, rather than engaging in their own research, or contacting a union or advice agency.[85] Within the 'victim-complains' enforcement system that exists in respect of the vast majority of employment rights in the UK,[86] access to justice and the rule of law depend upon workers' individual legal literacy and vigilance. Deficits here may mean that people do not act upon injustices and may not even register them as such.[87] Much is therefore entrusted to HR professionals in terms of bringing employment law into the workplace.

---

81 Hertogh (n 64 above).

82 T Colling, 'Trade union roles in making employment rights effective' in L Dickens (ed), *Making Employment Rights Effective: Issues of Enforcement and Compliance* (Hart 2012).

83 L Dickens, 'Women – a rediscovered resource?' (1989) 20(3) Industrial Relations Journal 167; E Heery, 'Debating employment law: responses to juridification' in P Blyton, E Heery and P Turnbull (eds), *Reassessing the Employment Relationship* (Palgrave Macmillan 2010) 71.

84 P Pleasance, N J Balmer and C Denvir, 'Wrong about rights: public knowledge of key areas of consumer, housing and employment law in England and Wales' (2017) 80 Modern Law Review 836.

85 N Clark, B Stumbitz, J Keles and J Woodcock, Newham Working Student Pilot Project: Summary Report (Middlesex University 2020). ; J Casebourne, J Regan, F Neathey and S Tuony, *Employment Rights at Work – Survey of Employees* (Department of Trade and Industry 2006).

86 L Dickens (ed), *Making Employment Rights Effective: Issues of Enforcement and Compliance* (Hart 2012).

87 Pleasance et al (n 84 above) 838.

Given the importance of HR managers to employment law in these respects, questions arise regarding their own acquisition of legal knowledge and of their interpretation and application of the law. Human resource management (HRM) is a primary site where legalities can become bound up with other social structures; where law can become 'managerialised',[88] as we put it above, losing its 'normative integrity'.[89] HR professionals and their professional bodies may be thought of as quasi-legal actors, with some level of legal expertise, who have a powerful role in disseminating symbols of labour law and shaping societal understandings. In addition to orally advising employees and managers (depending on the model of HR delivery), a crucial element of HR work involves textualisation and record-keeping: writing contracts, offers of employment, policies, procedures, guidance and dismissal letters. LCR has emphasised that '"getting it in writing" makes a difference. It makes what actors say more emphatic, more permanent, and more important (some say more "legal").'[90] Such textualisation can accordingly bolster the apparent legitimacy of HR's version of legality, conferring authority on their articulation of 'the legal'.

A focus on the legal consciousness of HR professionals also allows for connections to be traced between the impact of law in particular organisational settings and the wider political economy. Managerial discourse is replete with justifications of capitalism,[91] and the HR variety, in particular, tends to involve legal ideology, incorporating elements of employment rights talk as well as economic rationalities. This blend can have a powerful influence on understandings of legality at work, providing an important part of the context which shapes '*our* beliefs about the experience and the capacities of the human species, *our* conceptions of justice, freedom, and fulfilment, and *our* visions of the future'.[92]

If LCR is to make the desired and fullest possible contribution to labour law scholarship, its focus must extend beyond workers to the legal consciousness of HR professionals. An ESLL framing highlights the importance of situating HR professionals and HRM within the wider political economy, and of considering their role in the ongoing renewal of legalities not only within organisations but also in society more

88 Edelman (n 15 above).
89 Barmes (n 16 above) 183.
90 Ewick and Silbey (n 9 above) xii.
91 L Boltanski and E Chiapello, *The New Spirit of Capitalism* (Verso 2018).
92 K Klare, 'The public/private distinction in labor' (1982) 130 University of Pennsylvania Law Review 1358.

generally. Not all employing organisations have HR departments.[93] Nonetheless, the work of the profession and its professional bodies can powerfully shape shared understandings of what is 'fair' and 'appropriate', often codified as 'best practice' or standardised procedures, which extend beyond particular organisational boundaries or workplace experiences. Via its professional bodies, HRM provides much of the information and rhetoric around employee and worker entitlements, what they should expect and what is expected of them, thereby exerting a powerful influence over the contexts in which legal consciousness is (re)produced.[94] Such ideologies also involve political and economic elements which temper how the 'legal' is represented. Informed by and informing more general managerial discourses, HR professionals are the first audience and also important purveyors of *The New Spirit of Capitalism* which justifies and renews our ongoing participation in a system that reproduces profound inequalities.[95] In this sense they are a special case with regard to legal consciousness, having a powerful role both in shaping workers' legal consciousness at work and, indirectly, in influencing our wider collective imaginary of law and the economy.

SITUATING THE LEGAL CONSCIOUSNESS OF HR PROFESSIONALS

As a first contribution to the project of understanding the legal consciousness of HR professionals, we explore, in this final part of the paper, the social, legal and economic developments that occasioned the emergence and growth of HRM. We rely here in particular on Dobbin and Sutton's analysis of the growth of HRM in the United States (US), which demonstrates and explains the tendency of organisations to comply only minimally with employment laws as the rationalities associated with compliance become focused primarily on efficiency rather than justice or rights.[96] Shifting our focus to the HR profession in the UK, we then address the question of how compliance strategies and

93 HR professionals are estimated to be present in around 81 per cent of medium-sized organisations, 47 per cent of small and 29 per cent of micro organisations. CIPD, Making Maximum Impact as an HR Professional in an SME (Chartered Institute of Personnel and Development 2016) 2. While the figures are not directly comparable, trade union presence, measured on a workplace basis, was 51 per cent overall in 2020, ranging from 31.5 per cent in smaller establishments to 65.7 per cent in larger ones: National Statistics, 'Trade union statistics 2020'.

94 Kirk (n 17 above).

95 Boltanski and Chiapello (n 91 above).

96 F Dobbin and J R Sutton, 'The strength of a weak state: the rights revolution and the rise of human resources' (1998) 104 American Journal of Sociology 441.

the knowing, conscious construction of legalities within organisations relate to more widely held understandings of law and justice outside of the organisations themselves. We consider the under-theorised processes through which legal ideology is 'transmitted from the specialist arenas of legal discourse', as Alan Hunt put it, installing itself within popular consciousness to varying degrees;[97] how, in the course of such processes, legal ideology is 'struggled over and recombined with' other – especially economic – ideological elements.[98]

Legal proliferation and the rise of HRM

Outside of the specific field of LCR, a number of North American scholars have examined the operation of law within employing organisations. Building upon the seminal work of Philip Selznick, scholars have focused in particular upon the ways in which organisations implement, translate, textualise and encode law into organisational artefacts, routines, contracts, policies, procedures and rules, which come to inform notions of legality.[99] Organisations do not do this in a disinterested way. They construct and institutionalise forms of compliance with laws in a manner that mediates the impact of those laws on the economy and society.[100] This helps to explain why, after many decades of legal proliferation – more and more employment law – there is at the same time more low-paid, insecure, 'indecent' work and growing inequality, globally and nationally.[101]

From its roots in worker welfare, industrial relations and personnel management, the development and professionalisation of HRM was at least partially bound up with the expansion of labour law and attendant legal complexity, in combination with an increasing sophistication of management techniques. As related by Dobbin and Sutton, the boom in personnel – soon to be 'HR' – offices in the US between the mid-1960s and the mid-1980s followed particular legal landmarks involving non-discrimination, health and safety, and pensions.[102] The complex and ambiguous nature of regulations led employers to create new departments to manage legal compliance, 'not because the law dictated that they do so but because the law did not tell them *what*

97 Hunt as n 5 above) 149.

98 Ibid.

99 P Selznick, *Law, Society, and Industrial Justice* (Russell Sage 1969); L B Edelman, 'Legal ambiguity and symbolic structures: organisational mediation of civil rights law' (1992) 97(6) American Journal of Sociology 1531.

100 Edelman (nn 15 and 99 above).

101 International Labour Organisation, Decent Work Report (International Labour Organisation 1999).

102 Dobbin and Sutton (n 96 above).

to do'.[103] In some organisations, a trade union presence may have created an additional impetus to HR to 'legalise' its procedures.[104] Soon, however, specialists promoted these departments as all-purpose solutions to management problems and, with that, the role of HRM became firmly established.[105] Management academics responded by offering new rationalities that would further HRM as a science, so that, between 1975 and 1985, there was a shift in emphasis, when it came to justifying specialist offices, from compliance with complex or ambiguous laws towards how they 'helped rationalize the management of human resources'.[106] As institutionalisation proceeded, 'middle managers came to disassociate these new offices from policy and to justify them in purely economic terms' – 'efficiency' and cost-minimisation.[107]

At the same time, legal proliferation combined with legal ambiguity prompted organisations to create compliance strategies that would 'stand up in court',[108] focusing routinely on *symbolising* a commitment to compliance[109] rather than attempting truly to embed core principles in organisational decision-making and practice.[110] While the emerging paradigm of HRM certainly has variants, prominent tropes – for example, 'diversity and inclusion', 'commitment', 'people are our greatest asset' – can be understood to fuse the twin discourses of progressiveness and high performance. Wherever such tropes were dominant, formal legal rules could become conjoined at organisational and workplace level with economic rationalities. Instead of emphasising the importance of compliance with equality law, for example, 'personnel specialists came to argue that diversity in the workplace increases efficiency in and of itself'.[111] Instead of acknowledging the importance of employee wellbeing, health and safety initiatives were framed as 'the key to winning employee commitment to the firm according to the HRM paradigm'.[112]

In explaining how law's normative force was thereby weakened or subverted, Dobbin and Sutton connect their analysis of organisations to the politico-legal regime of the US, in which 'the Constitution

103 Ibid 444 and 470.
104 Selznick (n 99 above) 154
105 Dobbin and Sutton (n 96 above) 471.
106 Ibid 475.
107 Ibid 441.
108 Ibid 447.
109 Ibid 449.
110 Barmes (n 16 above) .
111 Dobbin and Sutton (n 96 above) 445.
112 Ibid 456.

symbolizes government rule of industry as illegitimate'.[113] The federal state is administratively weak, they suggest, but normatively strong.[114]

> [It] issues ambiguous mandates to organizations, changes rules frequently in response to protracted political negotiations and litigation, and enforces its rules in a fragmented and indecisive way. Although these features cause it to appear weak, we argue that they produce a peculiar kind of state strength.[115]

In this account, it is the regulatory framework that leads, or perhaps allows, managers to 'recast policy-induced structures in the mold of efficiency',[116] and it is the business-owned nature of demonstrating compliance that makes it inevitable that economic objectives overtake the legal. In administratively weak states, like the US, organisational compliance with the law comes to focus on preventing overt discrimination, or extreme risks to health and safety, while at the same time, compliance professionals increasingly suffuse business-case, market rationalities into organisational practices, policies and procedures. US organisations are able to construct the meaning of rights and the terms of demonstrating compliance, shaping the behaviour of formal legal institutions and the very meaning of law.[117] The mere presence of compliance procedures creates an 'illusion of fairness' that primes judges to expect compliance and non-discrimination.[118] In contrast, administratively strong states such as France are less prone to this divergence between normative rhetoric and reality. The French Constitution 'does not severely limit state control of private enterprise or fully separate state powers', but rather the state 'tends to mandate substantive employment outcomes rather than creating ambiguous and complex regulations'.[119] As a consequence, 'until very recently, French firms had not developed the kinds of internal legal codes of employment that U.S. firms developed'.[120]

Dobbin and Sutton do not extend their analysis to other countries, but we might position the UK somewhere between these poles, with stronger labour laws than the US, but a much more fragmentary

113 Ibid 441.
114 Ibid 441.
115 Ibid 442.
116 Ibid 443.
117 Edelman (n 15 above) 22.
118 Ibid 219.
119 Dobbin and Sutton (n 96 above) 445.
120 Ibid cf A C L Davies, 'Judicial self-restraint in labour law' (2009) 38(3) Industrial Law Journal 278–305 on the absence of robust scrutiny of managerial practices.

enforcement regime than France.[121] At the heart of that regime lies a system of specialist employment tribunals geared towards adjudicating the rights of working people without undue formality. Research suggests less judicial deference here than in American courtrooms to organisationally defined compliance, with significant time and effort devoted to adjudicating the substantive and procedural fairness of organisational decision-making and behaviour.[122] Nonetheless legal scholars in the UK argue that the system is similarly effective when it comes to breaches of 'core' labour rights, human rights or modern slavery laws, while leaving widespread, lower-level violations and abuses largely unchecked.[123] In this way, over the course of many decades, workplaces have become increasingly sanitised and civilised, with the most extreme forms of abuse becoming less prevalent, while myriad inequalities and injustices have been allowed to persist.[124]

Societal legal consciousness, managerial discourse and legal ideology

How do (conscious) compliance strategies and the construction of legalities within organisations relate to more widely held understandings of and interactions with the law? Dobbin and Sutton suggest a link between the two in the following terms:

> [T]he administrative weakness of the state is the cause of its normative strength, for this weakness ensures that *Americans will come to see civil society and the market as the sources of social phenomena that are in fact generated by the state*.[125]

Quite generally, Dobbin and Sutton suggest, Americans have developed 'collective amnesia about the state's role in shaping private enterprises', swallowing more or less wholesale the theory that 'firms operate in a Hobbesian economic state of nature, in which behavior depends very much on managerial initiative and markets and very little on political initiative and law'.[126] This is, of course, an empirical question concerning legal consciousness and its interstices with political ideology, a conclusive answer to which would require careful

121 For a discussion of how Labour has had to struggle in the UK 'against liberal constitutional values to secure: trade union freedom [and] economic democracy', see K D Ewing, 'Socialism and the constitution' (2020) 73(1) Current Legal Problems 27–58.

122 Barmes (n 16 above) 247.

123 V Mantouvalou, 'Legal construction of structures of exploitation' in H Collins, G Lester and V Mantouvalou (eds), *Philosophical Foundations of Labour Law* (Oxford University Press 2018).

124 Barmes (n 16 above).

125 Dobbin and Sutton (n 96 above) 443, emphasis added.

126 Ibid 472.

study of the evolution of norms and attitudes among the great mass of society. Of particular interest, for our purposes, is the suggestion that the implementation of law by organisations can shape wider societal legal consciousness, so that people discern legality as organisationally given. What implications might this have for workers' conceptions of law and the reproduction of legality? How do HR professionals, implicated in these processes, themselves think of the law, regulation, the genesis of organisational legality and their reconciliation and interrelation with economic objectives and managerial priorities?

In addressing such questions, it is important to recognise HR's prominent role in consciously formulating, manipulating and projecting a particular version of legality, which is itself shaped by HR professionals' own sense of what is right and appropriate: by their legal consciousness. The professional project contains legal ideologies, 'a complex of distinct discourses operating at increasing distances from doctrinal discourses',[127] which bodies, like the Chartered Institute of Personnel and Development (CIPD) in the UK, *produce* as well as transmit.[128] Such ideologies draw upon applicable law but are also inflected by institutionalised, professional interests. HR practitioners do not always toe the line of their professional bodies. Still, professionals are bombarded by particular discourses, selective information and explicit and implicit suggestions as to what an idealised HR professional looks like.[129] The growing influence of professional bodies over accredited courses in HRM in the UK and US has led to concern that 'the academy has entered into a Faustian pact whereby it adheres to an unreflective, unitary conceptualisation' of HR research and practice.[130]

Indeed, part of HR's claim to professional status relates to its professed legal expertise.[131] In the UK, the CIPD is a key actor in the field of employment relations and the law, as is Acas, a non-governmental body providing advice, conciliation, mediation and arbitration to employers and workers. Both Acas and the CIPD play a role in surveying the evolving legislative landscape and articulating accessible versions of legal knowledge for their members and the public respectively. The CIPD also regularly responds to governmental consultations and otherwise contributes to policy debates. Both institutions thereby interpret, translate and disseminate law into society. The CIPD positions itself as an expert on work, 'setting

127 Hunt (n 5 above) 7.

128 Althusser (n 59 above). The CIPD is the professional body for HR in the UK.

129 Kirk (n 17 above).

130 S Gilmore and S Williams, 'Conceptualising the "personnel professional"' (2007) 36(3) Personnel Review 398–414, 408.

131 Kirk (n 17 above)

standards', and providing 'impartial research' which 'gives media and policy makers valued insights on the world of work'.[132] Its current slogan is: 'championing better work and working lives'.[133]

HR practitioners are often looked to for advice on problems at work and employment law,[134] and they routinely inscribe law into organisational policies, procedures, practices and culture. While trade unions provide similar functions, and may present rival framings and interpretations, their declining reach into workplaces and industries is well documented, and they have anyway been less widely credited as ideologically *neutral* purveyors of information. Understandings of what is fair, standard, 'the going rate', reasonable and so on at work may therefore be increasingly shaped by HR discourses of what should occur. Given the location of HRM professionals as managerial agents, however, what should occur is always and everywhere interpreted as what is appropriate in light of 'market realities'.[135] As such, the HR profession has an interest in regulation as part of their proffered professional 'expertise' and 'legitimacy', even possibly exaggerating the importance of law.[136] HR practitioners are often low status within organisations relative to other actors and seek ways to bolster their professionalism and necessity to the organisation. At the same time, their role as managerial agents may involve keeping compliance minimal where it otherwise threatens to interfere with profit or managerial prerogative.[137]

HR managers work within a context that is riven with contradictions.[138] At the same time as the profession strives to maintain a reputation as an employee champion, it also presents itself as a partner of business.[139] In recent years, such contradictions have become ever more apparent, to the extent that the profession now faces a profound crisis of social legitimacy.[140] Within intensified global competition and financialisation, contradictory pressures have increased to the

132 See CIPD website.

133 'Giving HR a voice' CIPD website.

134 Clark et al (n 85 above).

135 In interviews, as part of ongoing data collection for this project, the trope of 'market realities' is deployed repeatedly by HR professionals, often in answer to why moral considerations and legal aspirations *must* be tempered and subdued.

136 Kirk (n 17 above).

137 Ibid.

138 P Thompson, 'The trouble with HRM' (2011) 21 Human Resource Management Journal 355; T Dundon and A Rafferty, 'The (potential) demise of HRM' (2018) 28 Human Resource Management Journal 337.

139 H Francis and A Keegan, 'The changing face of HRM: in search of balance' (2006) 163 Human Resource Management Journal 231; Gilmore and Williams (n 130 above) 398.

140 Thompson (n 138 above).

detriment of the 'employee champion' face of HRM.[141] While the CIPD aspires to be 'the moral compass of business', organisations may not always heed its direction, and it has been suggested that the profession has not been able to address long-standing societal trends towards precarity, and the growing problem of in-work poverty.[142] While HR may not be in the driving seat with regard to societal trends towards precaritisation,[143] neither are they in a position to put a hand on the brake. Few HR professionals think of themselves as 'employee champions,[144], and as much as 'business partners', they may in fact become the 'handmaidens of efficiency' within organisations.[145]

This growing 'crisis' of HRM threatens its status and the very legitimacy of the professional project.[146] The idea and rhetoric of HRM, critics argue, offers far more than it delivers, and possibly *can* deliver within a context of neoliberalism.[147] For Thompson, the 'trouble with HRM' is that 'HR managers are increasingly not the main architects of key work and employment trends'.[148] With financialisation and the rise of the so-called 'gig' economy in which platforms bypass employment protections, there may be a decreased reliance upon HR departments, and the high commitment management strategies upon which most HR models are premised may come under increasing strain. Finally, the way that HRM as a subject is taught in business schools can lack a sufficient diversity of perspectives and critical engagement with economic arrangements. Dundon and Rafferty warn of a potential 'immiseration' of the subject matter, and by extension the practice of HRM, unless a new professional focus can be carved out which is distinct from free market ideology.[149] This is tied more specifically to the idea of labour market flexibility as the fulcrum around which policy discourses revolve, trumping arguments in favour of worker-protective measures. Yet, the CIPD continues to voice commitment to a basic level of employment law protections, perhaps in part because the law forms a pillar of their claimed expertise.

---

141 P Thompson, 'Disconnected capitalism: or why employers can't keep their side of the bargain' (2003) 17 Work, Employment and Society 359.

142 Dundon and Rafferty (n 138 above).

143 Thompson (n 138 above).

144 D Nickson, S Hurrell, C Warhurst, K Newsome, D Scholarios, J Commander, and A Preston, '"Employee champion" or "business partner"? The views of aspirant HR professionals' (2008) CIPD Centres' Conference.

145 T Kochan, 'Social legitimacy of the HRM profession: a US perspective' in P Boxall, J Purcell and P M Wright (eds), *The Oxford Handbook of Human Resource Management* (Oxford University Press 2009).

146 Thompson (n 138 above).

147 Ibid.

148 Ibid 364.

149 Dundon and Rafferty (n 138 above).

Today, HR discourses tend to reflect what Fraser has termed 'progressive neoliberalism'.[150] In line with the political contradictions of present-day financialised capitalism, and recalling 'third way' thinking, this mixes 'truncated ideals of emancipation and lethal forms of financialization'.[151] A strongly market-framed conception of labour law runs through the professional project of the CIPD, for example, reflecting and encouraging a wider trend towards the marketisation of law, and employment law in particular, at the national and the supranational level.[152] With the 'flexibility' imperative always front and centre, legal rationalities are increasingly presented in ways that,

> *must be so* because [the law] is crafted in response to the putative traits and truths of labour markets themselves ... labour law as a subject of politics and contestation recedes while experts and technocrats step forward to elucidate and elaborate the rules and policies to govern labour markets.[153]

The objectives of labour law are thus 'resituated' in relation to the market.[154] Better working conditions may be achieved, it must be concluded, by facilitating rather than restricting the market. Objectives concerning the direct pursuit of distributive justice, social solidarity and the moderation of power asymmetries are, meanwhile, demoted,

> as incompatible with markets operating in their ideal, most efficient mode unless they manifest in the form of an extreme or 'core' individual labour rights violation like child labour or forced labour.[155]

A place remains, exceptionally, for basic non-discrimination rights, since these 'aid in the normalisation and realisation of the dream of fully inclusive and pervasive markets'.[156]

That the emergence and professionalisation of HR departments has been bound up with legal proliferation, and that these departments may respond to ambiguous state law with minimally compliant social structures, may helpfully be considered as one part of a larger picture. 'Capitalism transforms itself by integrating critique',[157] and HRM can be an important part of that process. Boltanski and Chiapello view managerial discourses as the transmitter *par excellence* of *The New Spirit of Capitalism*, the ideology which justifies our continued

150 N Fraser, 'The end of progressive neoliberalism' (*Dissent* 2 January 2017).
151 Ibid.
152 Rittich (n 23 above).
153 Ibid 333.
154 Ibid 335.
155 Ibid.
156 Ibid 336.
157 Boltanski and Chiapello (n 91 above) xvii.

engagement with that system.[158] Over time, a wide range of ideological justifications has been deployed to legitimise and bolster capitalism. Legal ideology has played a role here, articulated at times alongside or in combination with other non-legal ideologies.[159] Translation chains between normative discourses to economic practices are 'forged' through both political instruments and management tools; law is inscribed to greater or lesser degrees in management policies and procedures.[160] Tracing such discourses within management literature, Boltanski and Chiapello show these to reflect and inform employer thinking, reproducing and renewing capitalism, acknowledging past failings and problems and offering solutions which become seemingly enlightened fads and fashions.

As law is implemented, and as workers attempt to 'mobilise' their rights, actors such as HR professionals can,

> shape rights holders' perceptions by referencing a range of available interpretive frameworks including not only law, but also other cognitive and normative structures that may undermine law. For this reason, informal rights negotiations can be understood as taking place not only 'in the shadow of the law' (Mnookin & Kornhauser 1979), but also in the shadow of other social institutions.[161]

These other institutions, such as 'the market', can be wielded as ideologies which 'shape how actors understand workplace experiences in ways that legitimate and maintain domination'.[162] The task remains to investigate empirically how such processes, practices and discourses are experienced by HR professionals themselves, how law is implicated and how this contributes to societal legal consciousness. We must examine the work law does in concert with economic, political and cultural ideologies in settings such as workplace procedures and staff handbooks and in processes such as recruitment and selection, appraisal and performance management.[163]

As to the question of how HR's constructions impact upon societal legal consciousness, we share Boltanski and Chiapello's view that people are well able to discern the gaps between their lived experience and managerial discourses 'to the point where capitalism must, in a way, offer – in practice – reasons for accepting its discourse'.[164] People

158 Ibid.
159 Hunt n 5 above) 134.
160 Boltanski and Chiapello (n 91 above) xv.
161 C Albiston, 'Bargaining in the shadow of social institutions: competing discourses and social change in workplace mobilization of civil rights' (2005) 39 Law and Society Review 11, 16.
162 Ibid 17.
163 Hunt (n 5 above) 135.
164 Boltanski and Chiapello (n 91 above) xxxi.

are not dupes, but legal ideology is produced and employed precisely so as to bolster legitimacy and incorporate critique. The ensemble of discourses draw from as well as form elements of our cognitive frameworks, 'some of which acquire greater purchase than others'.[165] Ideologies of the legal and economic 'do not come into existence fully fledged and are not transmitted as complete "systems" into the vacant consciousness of the subordinated'.[166] Rather, the reproduction of social order is a dynamic social process in which neither consent nor dissent are deemed to be 'natural', but instead 'the result of the activities that constitute the hegemonic struggle in society, and in which law participates'.[167]

CONCLUSION

If the aim, or one of the aims, of labour law scholarship is to assess the effects of the law on real people – workers, employers, society at large – then it would seem imperative that those people be treated as 'participative and experiencing subjects of law at work' and not simply as the objects of legal regulation.[168] As Adelle Blackett recently observed, scholars of labour law have long acknowledged the 'socio-legal notion of the law of the shop'.[169]

> Labour law sources are acknowledged to be plural and the specificity of regulation emerges from the workplace ... Social actors in labour law... are not merely one component among many in the legal process. Rather, they are labor law's center of gravity.[170]

It falls to scholars to investigate actors' perceptions of the law and their responses to it, but also how their legal behaviour can shape the very substance of the law. Legal change may occur when actors seek to enforce their rights, or to mobilise in order to effect formal legal change – through lobbying parliament, for example, or strategic litigation – and in their more quotidian interactions with the law: their choices routinely to respect the rules or to engage, alternatively, in everyday transgressions; their construction, in communication with co-workers or other employers, of alternative or additional social norms. The frameworks and methods that we adopt as scholars must allow us to recognise and pay attention to sites of law that are actor-centred

---

165 Ibid xv.

166 Hunt n 5 above) 151.

167 Ibid 57.

168 Hayes (n 10 above) 3.

169 A Blackett, *Everyday Transgressions: Domestic Workers' Transnational Challenge to International Labour Law* (Cornell University Press 2019) 43.

170 Ibid.

as well as state-centred, and to the systems of meaning employed by employers and workers, as well as policymakers and the judiciary, in their interpretation and application of the law.

In a 2019 article, Dukes proposed a framework for the study of labour law that was focused in the first instance on the contracting behaviour of workers and employers, conceiving of such behaviour, with Weber, as economic social action, and seeking to understand how it was shaped by the particular *labour constitution* or *constitutions* within which it proceeded.[171] 'Labour constitution' was defined here with reference to Weber as the historically given ensemble of rules, institutions, social statuses, economic and technological conditions, which together shape decision-making in respect of the question of who gets what work under which terms and conditions.[172] Dukes' *economic sociology of labour law* framing was interpretative in orientation, with law conceived as internal to situated behaviour and social interactions and categorically not as a simple external constraint on (economic) social action. Its construction around the two key notions of the contract for work and the labour constitution nevertheless bore the risk of reinforcing conceptual gaps between agency and structure, especially if the relation between the two notions was conceived in terms of unidirectional influence only, the latter shaping the former. While the proposed ESLL framing sought to relate economic sociological analyses of contracting behaviour to broader questions of political economy, moreover, the precise means of doing so was not worked out in any detail.

In this paper, we have argued for the significant contribution that legal consciousness research can make to the study of labour law today. As developed and utilised by LCR scholars, the concept of legal consciousness can help us to understand the ways in which laypeople interact with labour law, legal norms and discourses, including but extending beyond the more obviously legal means by which they respond to a sense of injustice. Over and above that, it can help us to understand how actors' quotidian interactions with law, broadly understood, can serve to enact and re-enact, to construct and deconstruct, to shape and reshape legal rules. It encourages us to question how competing rationales and ideologies, including economic and market-focused rationales and ideologies, can become bound up with interpretations of the law, informing and shaping legal behaviour. Analysis that focuses on the legal consciousness of HR managers can aid consideration of the impact of HRM, broadly understood, on workers' legal consciousness, and it can allow for connections to be traced between the impact of law in particular organisational settings and the wider political economy: the evolving nature of capitalism and capitalist rationales. The task

171 Dukes (n 11 above).
172 Ibid.

remains to document how HR professionals themselves understand structures of legality, their (re)production in everyday organisational life, how they experience the contradictions of regulation, market and morality, and under what circumstances particular configurations 'win out'. A legal consciousness lens reveals that the value of such subjective accounts lies, above all, in what they can tell us about less accessible structures of legal-economic hegemony and their reproduction and enactment at work.

Northern Ireland
Legal Quarterly
Winter Vol. 72 No. 4 (2021) 771–798
Article DOI: 10.53386/nilq.v72i4.931

Law, information, and contemporary finance in the United States: a sociological perspective

Bruce G Carruthers

Northwestern University, Illinois
Correspondence email: b-carruthers@northwestern.edu

ABSTRACT

The global financial system has become remarkably complex as it combines high transaction volumes with growing speed. Financial transactions depend critically on information to mitigate uncertainty and vulnerability, and such transactions are therefore affected by recent developments in information technology, driven by fintech firms and commonly termed 'big data'. The volume, velocity and variety of information is unprecedented and poses new challenges for governance. Legal rules for data ownership, privacy, security and usage are becoming obsolete and ineffective in the context of algorithmic information processing and decision-making. Yet some types of information remain embedded in financial contracts and regulations, relatively unaffected by these developments. This variation challenges simplistic claims about big data and underscores how some of the historical particularities of the United States have gained global significance.

Keywords: information; 'big data'; financial markets; regulation.

INTRODUCTION

Financial markets depend on information.[1] Over the last three centuries, use of price lists, financial newspapers, carrier pigeons, telegraphs, stock tickers, telephones, computers, Bloomberg terminals, fibre-optic cables, and now cloud computing and the internet all reflect the enormous appetite that financial market participants have for information, via whatever technology is currently available. The reason is straightforward: credit transactions and investment decisions face the twin problems of vulnerability and uncertainty. Vulnerability means that the financial interests of the lender/investor are at the mercy of someone else's future actions, depending on the size and maturity of the loan or investment. A debtor who does not repay harms the lender,

1 Malcolm Campbell-Verduyn, Marcel Goguen and Tony Porter, 'Finding fault lines in long chains of financial information' (2019) 26 Review of International Political Economy 911, 913.

and the bigger the loan, the worse the harm. Lenders and investors also face uncertainty. They are ignorant of the borrower's future actions, not knowing who will repay, or if an investment will be profitable. Of necessity, they make predictions.

Lenders and investors manage their uncertainty by collecting information about the borrower/investee's willingness and ability to repay, both *ex ante* and *ex post*. Knowledge is the solution to ignorance. Vulnerability is frequently addressed using collateral, which requires that the lender be able to identify and track a specific asset subject to a security interest. Here registration and traceability are critical, and both depend on a tracking system or registration infrastructure. Vulnerability can also be mitigated via diversification into multiple loans or investments, which requires the investor to identify and pursue independent financial alternatives. Additionally, it can be addressed by *ex post* constraints imposed on borrower behaviour.

Hardware and software developments in information technology are now reshaping how participants in financial markets address problems of vulnerability and uncertainty. The term 'big data' signals a substantial increase in the volume, velocity and variety of information, and 'fintech' firms wed such data to financial decision-making.[2] Advances in information technology make it possible to manage and process ever more data. Many of these developments are captured by Shoshana Zuboff's idea of 'surveillance capitalism', although there is less discontinuity with the past than her dramatic formulation suggests.[3] This: 'new form of information capitalism aims to predict and modify human behaviour as a means to produce revenue and market control'.[4] It utilises the exceptional amounts of information that are now available about the actions of billions of individuals, harvesting, aggregating, analysing, and monetising digital traces of online activity, and operates: 'through unprecedented asymmetries in knowledge and the power that accrues to knowledge'.[5] The goal is to predict and influence human activity, in pursuit of profit. Social media offers a vivid example of what Zuboff has in mind: Facebook tracks in detail the behaviour of billions of users and earns billions of dollars in profits.

With their historical dependence on information, financial markets provide a good opportunity to assess Zuboff's claims against a broader

2 Federal Trade Commission, *Big Data: A Tool for Inclusion or Exclusion?* (Washington DC 2016) 1.

3 Shoshana Zuboff, *The Age of Surveillance Capitalism* (Public Affairs 2019).

4 Shoshana Zuboff, 'Big other: surveillance capitalism and the prospects of an information civilization' (2015) 30 Journal of Information Technology 75.

5 Zuboff (n 3 above) 11.

backdrop.[6] In the United States (US), creditors and investors have always sought to predict and influence what debtors will do, so these aspirations are not new. Neither is the concern for earnings. Nor is the appetite for information, for some for-profit companies have long specialised in the production of large volumes of information about the creditworthiness of both firms and individuals. As detailed below, for borrowers that issue debt securities, US bond rating agencies have been arbiters of creditworthiness, gathering information and rating bonds since the early twentieth century. Their rating systems are now legible around the world. Agencies like S&P tout the predictive value of their ratings by documenting the association between default rates and ratings (higher ratings mean lower default rates). Information also drives the allocation of trade credit among small firms, and in the US they have had their financial status assessed since the mid-nineteenth century by Dun and Bradstreet and its predecessors. And individual consumers have for many decades been tracked by rating agencies like TransUnion, Experian and Equifax, which in the US maintain credit files on hundreds of millions of persons and calculate FICO scores to measure their creditworthiness. All this information guides investors and lenders in their financial decisions: where to invest? To whom to lend? How to make more profitable predictions about the future? It may not exactly be the surveillance that concerns Zuboff, but the creation and use of information set precedents and posed problems that can put 'surveillance capitalism' in proper perspective.

Financially relevant information comes from many sources, both public and private. Some information is provided as a public good: the US Commerce Department publishes an enormous amount of economic data, and each release is closely monitored by financial market participants. Almost every country generates national income statistics that describe the state of their economy, its size, growth, and trade with the rest of the world. Other information is privately created and distributed. Financial exchanges provide price and transaction data, while maintaining strict ownership over such information as a type of intellectual property. Likewise, for-profit bond rating agencies evaluate fixed income securities and distribute their ratings as a key piece of credit information. Some private information is publicly mandated, and so has a hybrid provenance. For example, publicly traded US corporations regularly disclose standardised and independently audited financial information about their performance. They are required to do so as a matter of federal securities law.

It is not only private lenders and investors who demand financial information to reduce uncertainty. Some information has been used in

6 See also James W Cortada, 'A history of information in the United States since 1870' (2017) 52 Information and Culture 64.

the legal and regulatory apparatus that governs financial markets. Early in the twentieth century, US judges used credit ratings as indicators of business practice standards in order to gauge 'prudent' decisions.[7] When the Great Depression hit, bond ratings were employed by federal bank examiners as a way to bolster banks by changing how their bond portfolios were valued.[8] Instead of applying a simple mark-to-market rule that used current market prices, bonds rated 'above investment grade' could be valued at their historical cost, ie at their original purchase price. Since many bonds lost value during the Depression, this new rule, institutionalised by the Comptroller of the Currency in 1931, allowed banks to inflate the value of their bonds and strengthen their balance sheets, with the knowing cooperation of bank examiners. Other state and federal regulators followed suit and incorporated private bond ratings into their own prudential regulations, preventing pension funds and insurance companies from investing in assets that were too risky.

Lenders and investors have long sought information as a way to solve the problems of uncertainty and vulnerability. Financial markets had a tremendous interest in information and obtained it from many different sources. Recent changes in information technology offered new opportunities to generate and manage information, but does this mark a qualitatively new stage of capitalism? I argue that claims about the novelty of 'surveillance capitalism' are overstated, and that large amounts of information have already been generated and utilised in the past, particularly in finance. Furthermore, previous attempts to regulate information, but also to use it in regulation, give some purchase about how public policy might respond to the challenges posed by big data. Recognition of how much information has increased must be put into a broader context that also considers the quality of information, its form, content, structure, distribution, and usage. My approach draws on organisational sociology and work in the sociology of quantification to offer a richer appreciation of information and its role in finance, and I address a number of aspects: who is the subject of information? Who creates it? Who uses the information?

Terms like 'data', 'information', 'knowledge', 'variables', and 'measures' have been applied loosely in discussions of big data. For simplicity, I will use the term 'information' to denote some kind of

---

7 Marc Flandreau and Joanna Kinga Sławatyniec, 'Understanding rating addiction: US courts and the origins of rating agencies' regulatory license (1900–1940)' (2013) 20 Financial History Review 237.

8 Bruce G Carruthers, 'Financial decommodification: risk and the politics of valuation in US Banks' in Edward J Balleisen et al (eds), *Policy Shocks: Recalibrating Risk and Regulation after Oil Spills, Nuclear Accidents, and Financial Crashes* (Cambridge University Press 2017).

symbolic representation of an object, person, outcome, or process. I will particularly focus on electronic information, but obviously it can assume multiple forms. 'Data' refers to a corpus of information, typically but not necessarily organised as a set of variables that measure or reflect specific features of objects, texts, persons, outcomes or processes. Depending on the level of measurement, variables can be nominal (categorical), ordinal (ordered categories), or cardinal (with some kind of numerical value). And variables can be combined and processed to create new variables, or analysed to unearth relations between them (eg correlations). Such manipulations enable raw data to be turned into counts, ratios, indices, and other higher-order information that can serve interpretive and predictive purposes.

BIG DATA AND FINANCE

As more social and economic activity moves online, people are encouraged to create rich, granular data streams that are being continuously harvested, analysed, shared, and monetised. It is no longer that offline behaviour is recorded using separate measuring instruments, but rather that digital behaviour creates traces that are continuously and automatically stored. For example, even before someone makes a purchase, a consumer's interest in a particular commodity can be closely tracked via their online search behaviour, by the websites they visit, by their 'clicks' and 'likes', and the amount of time they spend viewing particular screens using their mobile and desktop devices. The software that enables people to move between websites also automatically records their movement. Firms now have a variety of techniques for tracking users, including 'cookies', device fingerprinting, and 'history sniffing', and they can even link users' behaviour across multiple devices, including smartphones, desktop computers, tablets, laptop computers, and other inanimate objects.[9] Additionally, their personal interests and activities can be linked to those of their friends and family, to whom they are connected via social media platforms, and to their own past behaviour. Electronic payment systems allow the platform to gather continuous data on a consumer's financial activity and status, and predictive models of consumer attention, engagement, and purchasing enable platform firms to sell advertising and otherwise steer the consumers to preferred websites and sponsored options. Online experiments with full randomisation and huge sample sizes allow the host website to determine which 'nudges' and 'decision architecture' work best in moving users toward a preferred alternative. Software is updated frequently, and 'black box' models

9 Federal Trade Commission (n 2 above).

exploit the latest in machine learning (ML) algorithms and artificial intelligence (AI) to develop statistical models that can involve millions of variables. Such complexity makes them virtually incomprehensible to ordinary humans. In the offline world, mobile phones now function like tracking devices, allowing apps to follow people wherever they go. Proximity to other mobile phone users can be confirmed if anyone posts a selfie online, as facial recognition software can identify each person in the image. Such data is collected by monopolistic 'big tech' firms, and only recently have authorities in Europe and the US begun to activate competition policy or impose privacy rules in response. Yet information seldom remains solely in the possession of the original repository. Instead, an ecosystem of data aggregators and brokers pull together information from multiple sources and sell it to multiple users, almost always without the knowledge of the data subjects. As these activities flourish, it is clear that they have gotten well ahead of public understanding and policy.

Many of the new opportunities to exploit information are being pursued by 'fintech' firms. These 'disrupters' of the financial system emerged from the tech industry, exemplified by Silicon Valley software, social media and platform firms.[10] Their core expertise is in information management rather than finance. Although small in size, they are relatively unconstrained by limited organisational capacity and as non-depository institutions they escape many of the strictures that regulators impose on banks.[11] Thanks to the development of cloud computing, fintech firms have less need to maintain their own information hardware. Instead, they can turn to vendors and easily scale up or down as needed.[12] New lending platforms match debtors with creditors, and the platform itself harvests information as well as fees.[13] Whether fintech will destabilise finance remains to be seen, but in one familiar scenario market incumbents acquire the startups and absorb them, or form alliances with them, before any major disruption occurs. A number of the largest banks have already acquired expertise in cybercurrencies not because they believe bitcoin to be the money of the future, or because they have embraced crypto-anarchist philosophies, but because the underlying distributed ledger technology offers useful

10 Xavier Vives, 'Digital disruption in banking' (2019) 11 Annual Review of Financial Economics 243.

11 William Magnuson, 'Financial regulation in the bitcoin era' (2018) 23 Stanford Journal of Law, Business and Finance 162.

12 Franklin Allen, Xian Gu and Julapa Jagtiani, 'A survey of fintech research and policy discussion' (2020) WP 20-21 Federal Reserve Bank of Philadelphia Working Paper Series 35.

13 Chris Clarke, 'Platform lending and the politics of financial infrastructure' (2019) 26 Review of International Political Economy 863.

capabilities that they wish to possess. Of course, disruption may occur if the big tech firms that currently manage online searches, purchases, or social activity decide to provide financial services to their large user-bases. If they do, these firms (eg Facebook, Google, Amazon, etc) are large enough to challenge even the biggest banks. Facebook, for example, recently announced its intention to develop its own currency, initially called 'libra' and now named 'diem'.

The significance of information partly stems from its incompleteness and uneven distribution. No one knows with certainty what the future will bring or what consequences may follow from a particular course of action. The severity of cognitive limits has been recognised in behavioural economics and its antecedents in organisational sociology by notions of 'bounded rationality' and 'uncertainty absorption'.[14] Such limits were stressed by Austrian School economists to argue for the superiority of decentralised markets over centralised planned economies.[15] Their unevenness (termed 'asymmetries of information') prompted the new economics of information, building on models of 'markets for lemons' and illustrating the significance of systematic differences in regard to who knows what.[16] And the particularities of how information is organised have been well appreciated by sociologists of quantification, accounting, and categories,[17] particularly when that information is inscribed in organisational practices. Within financial economics, however, the still highly influential 'efficient markets' approach proposes that, in efficient markets, prices fully reflect all available information.[18] According to this approach, market prices provide the single best summary of all that is known by everyone.

Information has often been treated as something of which there is simply more or less. With more information, a decision-maker

---

14 James G March and Herbert A Simon, *Organizations* (John Wiley & Sons 1958); Herbert A Simon, *Administrative Behavior: A Study of Decision-Making Processes in Administrative Organizations* 4th edn (Free Press 1997); Daniel Kahneman, 'Maps of bounded rationality: psychology for behavioral economics' (2003) 93 American Economic Review 1449.

15 F A Hayek, *Individualism and Economic Order* (University of Chicago Press 1948).

16 Joseph E Stiglitz, 'The contributions of the economics of information to twentieth century economics' (2000) 115 Quarterly Journal of Economics 1441.

17 Michael Power, *The Audit Society: Rituals of Verification* (Oxford University Press 1997); Ezra W Zuckerman, 'The categorical imperative: securities analysts and the illegitimacy discount' (1999) 104(5) American Journal of Sociology 1398; Wendy N Espeland and Mitchel Stevens, 'A sociology of quantification' (2008) 49 Archives of European Sociology 401, Marion Fourcade and Kieran Healy, 'Classification situations: life-chances in the neoliberal era' (2013) 38 Accounting, Organizations and Society 559.

18 Eugene F Fama, 'Efficient capital markets II' (1991) 46 Journal of Finance 1575.

knows more and can make better decisions. Arguments about big data or surveillance capitalism rest upon the claim that the volume of information has vastly increased. Information asymmetries mean that some parties to a transaction know more than others; in the canonical example, the seller of a used car knows more than the buyer about the car's true underlying condition, and whether or not it is a 'lemon'. While it is useful to discuss the total amount of information in a market, or to determine who knows more than others, it is important to recognise qualitative differences as well. Some of these differences matter a great deal for the role that information plays in financial markets, and for how that role changes.

Here I apply a simple framework and consider some ways in which information varies. The first issue concerns the subjects of information, ie what or who is it about? Concerns about surveillance capitalism are clearly driven by the expansion of information about individuals and their activities. But information can also be about financial prices (eg how much does it cost to buy 100 shares of IBM common stock?) and quantities (eg how many IBM shares were traded yesterday on the New York Stock Exchange?). It can concern distinctive qualities, as classifications pervade financial markets.[19] For example, bond ratings place debt securities into a set of discrete ordered categories that measure credit risk. Other economic categories, like industry, are unordered. Analyst recommendations turn on how a company is classified: at first Amazon, for example, was categorised by some analysts as being in the book industry, and by others as belonging in the tech industry. The valuations of Amazon varied enormously depending on this disputed classification (which determined the benchmarks to which it was compared). A second set of issues concern those who create and process information: what is the extent of their ownership and control over information? What are the rights and responsibilities of those who possess information? Do intellectual property rules or privacy standards apply? Who has duties in regard to cybercrimes, or money laundering? Is consent required from data subjects, and what documents such consent? How freely can holders distribute the information they possess about others? Must holders ensure that information is accurate, and how are such obligations enforced? A third set of issues concern the pragmatics of information: how is it used, in what situations, and by whom? Is information utilised to predict behaviour? Does it guide private financial decision-making? Does information inform public regulations? Can it trigger private or public rules? And who constitutes the primary audience for information? Is it directly actionable or does it just provide background and context?

19 More generally, categories undergird the process of uncertainty absorption.

Currently, several laws govern the production and use of information in US financial and credit markets to ensure orderly markets or to protect the public interest. Depending on the subjects of information, the creators, users or holders of information may be encumbered with obligations and responsibilities. Innovation has often challenged and circumvented these regulations. In fact, some innovations are intended to evade regulation, and regulators necessarily play a game of catchup. New products and processes may not meet strict regulatory definitions and so are not subject to oversight. Social media platforms, for example, fit badly into older industrial categories, as an anomalous combination of software company, media outlet, and telecommunications firm. Or innovators exploit regulatory loopholes to avoid compliance. Consider, for example, the emergence of a 'shadow banking system' which performs many banking functions but which is not subject to banking regulation because the entities that comprise it do not meet the official definition of 'bank'. Or recall the over-the-counter (OTC) financial derivatives market, which grew dramatically during the 1990s and 2000s as public regulators left it alone.[20] Today, fintech firms sit uneasily in the regulatory system because their activities are both hybrid and innovative.

New uses of information challenge existing standards, in part because the type of information that is now available, as well as its breadth and detail, were simply inconceivable when laws like the Fair Credit Reporting Act of 1970 (FCRA), for example, were passed. Relevant information now increasingly accumulates outside of credit reports and traditional credit rating agencies. Similarly, data security breaches now occur on a scale that was impossible when information was stored in paper files. A lone hacker can, in a single breach, abscond with confidential information about hundreds of millions of individuals, and sell it on the dark web. In 2017, Equifax, one of the biggest consumer credit rating agencies, experienced a security breach and confidential information on more than 145 million individuals was accessed and extracted.[21] Similarly, privacy standards confront unprecedented challenges, like the capacity to track people continuously in time and space, or to record proximity so that trackers can know who was with whom and when, or to document all that a person does with their mobile apps. Even ordinary household objects can become

20 Bruce G Carruthers, 'Diverging derivatives: law, governance and modern financial markets' (2013) 41 Journal of Comparative Economics 386.

21 General Accounting Office, *Consumer Data Protection: Actions Needed to Strengthen Oversight of Consumer Reporting Agencies, GAO-19-196* (General Accounting Office 2019) 1, 8.

monitoring devices, thanks to the 'internet of things'.[22] The very largest repositories of personal data are now owned and controlled by big tech firms like Google, Amazon, and Facebook, without prior public debate or policy consideration. And even as corporations exploit new information technologies, they have had to invest in cybersecurity or risk theft of their own confidential information. In 2013 the US store Target was breached and information on 41 million consumers stolen, a catastrophe for Target and a sobering example for other mass retailers.

BIG DATA IN THE PAST

Although current developments in big data are heralded as if they were without precedent, the role of private firms in the accumulation, analysis and commodification of large volumes of financial information began in the nineteenth century, using traditional paper-and-ink information technology. Starting in the 1840s, for-profit 'mercantile agencies' in the US began systematically to gather information about firms nationwide and to provide credit reports, and later credit ratings, to their clients.[23] Reports and ratings were then used by clients to reduce their own uncertainties and vulnerabilities in making credit decisions. Typically, wholesalers extended short-term, unsecured trade credit to their customers, who would be supplied with goods and then paid after a conventional period of time like 90 or 180 days, or even settling their accounts once a year. After they received goods but before they paid, customers were indebted to their suppliers. Suppliers faced a difficult situation: it was hard to sell to customers without providing credit, but extending credit to the wrong customer risked losing money. So mercantile agency clients were especially keen to know who was genuinely creditworthy. Local customers were part of the supplier's own community, and so local social networks made it easy to determine someone's reputation or ascertain past behaviour. But as commerce expanded, firms increasingly dealt with customers from other parts of the country, and so traditional reputation-based methods to assess creditworthiness did not work. Social networks grew threadbare at greater distance, and so suppliers sought alternative forms of information.

The Mercantile Agency was founded in 1841 by a businessman whose own failure during the 1837 crisis underscored the importance of credit.

22 Dan Feldman and Eldar Haber, 'Measuring and protecting privacy in the always-on era' (2020) 35 Berkeley Technology Law Journal 197.

23 Barry Cohen and Bruce G Carruthers, 'The risk of rating: negotiating trust and responsibility in 19th century credit information' (2014) 1-93 Sociétés contemporaines 39.

Lewis Tappan created an organisation based in New York City, initially serving New York wholesalers, and establishing a national network of confidential informants to provide information about firms around the country. Mostly, the informants were local attorneys, who typically knew a great deal about business dealings in their own community. In exchange for referrals for collection work, informants reported on local business and responded to queries, mailing information to the Agency's headquarters in New York. Their letters were transcribed into the Agency's proprietary ledgers and then destroyed to maintain the confidentiality of the source. Informants would discuss the state of a business, estimate its net worth, summarise the proprietor's reputation and history of dealings, and provide periodic updates. Out of this accumulation of largely qualitative and impressionistic information, the Agency produced reports and provided them to clients interested in a particular firm's creditworthiness. After the 1850s, the Agency and its competitors started to publish bound volumes containing summary ratings of tens of thousands of firms. Agency subscribers would regularly receive an updated version of the 'manual', containing an alphabetical listing of firms from a particular city or region, a brief statement of their line of business (eg saloon, tailor, dry goods), and then a rating that classified the firm into a discrete ordinal category. The categories looked like modern bond ratings, with some version of 'AAA' denoting the highest level of creditworthiness. Clients could then consult the manual, look up a firm to learn its rating, and judge the risk of extending credit. And the rating system made it easy to make quick decisions, in part because the seemingly precise ratings overlooked the complexities, ambiguities and equivocations contained in ledger information.[24]

Both the Mercantile Agency, later known as RG Dun, and its chief rival, Bradstreet's, expanded over the nineteenth century.[25] Dun augmented its informants with a growing number of branch offices, located both domestically and abroad, so it could use employees to gather information. The total amount of information also grew, and by the end of the century Dun manuals provided ratings on more than a million firms in every part of the US. The manuals were issued annually at first, then twice a year, and then on a quarterly basis. They provided useful information about firms that lacked a national profile, and which were typically of small or medium size. Consultation of rating manuals became part of standard business practice, and even financial organisations specialising in the provision of credit, ie banks,

24 This pattern is typical of 'uncertainty absorption'.

25 Bruce G Carruthers, 'From uncertainty toward risk: the case of credit ratings' (2013) 11 Socio-Economic Review 525.

became subscribers. Businesses managed their uncertainties by using information provided by rating agencies.

The rating agencies profited from the subscription fees they charged their customers, so in effect they adopted a 'user pays' business model. More subscribers meant higher revenues. And in order to maintain subscriptions, the agencies vigilantly protected their intellectual property. The manuals were not to be copied or shared with anyone except the authorised subscriber. Yet even as agencies maintained ownership of information, their ability to control its use and diffusion was uneven. Plagiarism and unauthorised replication, for example, was an ongoing concern, and the agencies struggled to prevent out-of-date manuals from circulating privately. The agency continually updated its contracts with customers to discourage them from sharing information with others, but the problem was not easily solved: valuable information was hard to manage.

As credit ratings gained importance, as more people used them to make credit decisions, and as the coverage of firms became more extensive, the agencies came under fire from two groups while the legal aspects of credit information were worked out. Agencies faced lawsuits from firms given a low rating: such firms sometimes sued claiming that the rating was mistakenly low, and that because others had withheld credit, the low rating had harmed the plaintiff. In effect, those bringing suit argued that low ratings acted like self-fulfilling prophecies. Agencies were also sometimes sued when they gave a high rating. If a client used the rating and granted credit to a firm that subsequently defaulted, then they might sue on the grounds that the rating was mistakenly high, and that the agency misled the lender and caused them to lose money. For some decades, the agencies faced a worrisome amount of litigation in state courts, but eventually the law settled on the idea that ratings, as information, were akin to opinions. They could be neither true nor false and were constitutionally protected as a type of free speech. Nevertheless, legal worries meant that the agencies carefully promoted their informational products on the grounds that they were generally useful, but not that they were literally true.

The ratings model was successfully transplanted to a very different credit situation in the early twentieth century. Mercantile agencies continued to provide information about small and medium-sized businesses (and eventually Dun and Bradstreet's merged in the 1930s). But their methods and model were copied starting in 1909 when John Moody began to rate railroad bonds. Bond issuers were among the largest and most capital-intensive firms, and they required long-term capital. Moody and his competitors classified railroad bonds (and later utilities, corporates and sovereigns) into an ordered category system in order to measure the riskiness of a bond. 'AAA' was the highest

rating, and connoted the lowest credit risk. Thanks to the mercantile agencies this format for credit information was already very familiar to the business community, although the application was new. Moody charged subscribers for his ratings, published in a manual issued annually, and so adopted the same 'user pays' business model. And the bond rating agencies became as important for long-term debt as the mercantile agencies were for short-term finance: virtually any entity issuing bonds would get rated by Moody's, Standard & Poor's, or Fitch. An unrated bond issue had a hard time attracting buyers, and a 'ratings downgrade' was much to be feared. Bond rating agencies also protected their ratings as intellectual property by putting constraints on their customers, but found the situation increasingly untenable after the invention of the photocopier. Once this device spread in the late 1960s, it became too easy for people to make unauthorised copies of the volumes that Moody's and its competitors published. Quickly, all the rating agencies shifted to an 'issuer pays' business model. Henceforth, an entity wishing to borrow by selling bonds paid the rating agency to rate the bonds. Despite these changes, ratings continued to be used by investors to gauge credit risk, just as they were used by financial regulators. Ratings also found new service when they were incorporated into private regulations, like the standardised contractual language created by ISDA (the International Swaps and Derivatives Association) for the OTC financial derivatives market.[26] Ratings were routinely used by derivatives market participants to calibrate and mitigate credit risk.

By the mid-twentieth century, ratings had become a ubiquitous type of information applied to short-term credit for small firms, long-term lending for large firms, and playing a key role in market governance. But matters did not stop there. Starting in the 1950s, national credit rating agencies compiled credit records for individual consumers, often expanding or merging local agencies that had previously serviced retail merchants in particular cities.[27] After the development of FICO scores in the 1960s, credit card companies, retail businesses, department stores, banks and other lenders could consult a single summary measure of an individual's creditworthiness and use it to decide whether or not to make a loan or offer credit, and at what price. FICO scores governed access to consumer credit, but eventually scores were applied in other contexts as well. Insurance companies, landlords, and employers have

26 Jon Gregory, *Counterparty Credit Risk: The New Challenge for Global Financial Markets* (Wiley 2010); Joanne P Braithwaite, 'Standard form contracts as transnational law: evidence from the derivatives market' (2012) 75 Modern Law Review 779.

27 Josh Lauer, 'Plastic surveillance: payment cards and the history of transactional data, 1888 to present' (2020) 7 Big Data and Society 1.

used them to gauge potential customers, tenants, and employees.[28] Mortgage lenders and home equity lenders use FICO scores. Credit scores now regulate much more than just consumer credit, and are readily incorporated into algorithmic decision procedures.

Some recent developments were foreshadowed by the invention of automated underwriting for home mortgages in the 1990s. Given the highly institutionalised market for home mortgages in the US, and given the standardisation both of the underwriting process and mortgages themselves, it was easy to use desktop computer technology to automate some aspects of the process.[29] Mortgage underwriting had traditionally been a complicated labour-intensive process involving many documents and much opportunity for discretionary decision-making and potential bias by loan office personnel. One of the virtues attributed to automated underwriting was its ability to curtail discrimination and ensure that all loan applicants were treated equally, and its development was led by Freddie Mac (the Federal Home Loan Mortgage Corporation).[30] It was also supposed to help speed up the approval process, cut costs, and 'democratise' access to credit. Since federal government agencies had set standards in home mortgage lending since the 1930s, it was unsurprising that a government-sponsored entity like Freddie Mac would take the lead in standardising mortgage underwriting through its Loan Prospector software product. But aspirations of more equitable and democratic credit were not realised.

The upshot was that towards the end of the twentieth century, decades before the current era of big data and surveillance capitalism, remarkable amounts of information about individuals, small and medium-sized businesses, large businesses, and any entity seeking to borrow by issuing bonds, was gathered and distributed on a global scale, and used to address the uncertainty that afflicted financial decision-making. Users sought this information to make predictions about the subjects of information, and the goal was to ensure that debtors met their obligations.

The legal status of these analytical activities was fairly well settled: bond ratings were like opinions, and their veracity entailed little legal risk for those who issued them. Instead, bond ratings supposedly faced a market test: there would be demand for them so long as they were sufficiently useful. And some of that demand derived from the official role bond ratings played in national and state-level prudential

28 Akos Rona-Tas, 'The off-label use of consumer credit ratings' (2017) 42 Historical Social Research 52.

29 John W Straka, 'A shift in the mortgage landscape: the 1990s move to automated credit evaluations' (2000) 11 Journal of Housing Research 207.

30 Ibid 208.

regulations (particularly the distinction between 'investment grade' and 'below investment grade'). The bond rating agencies possessed a unique status as NRSROs (nationally recognised statistical rating organisations), bestowed by the Securities and Exchange Commission, although there was little content to this status, nor even a set of well-defined criteria for how to achieve it. After 2008 the bond rating agencies were widely criticised for failing in their role as evaluators of structured financial instruments like mortgage-backed-securities and collateralised debt obligations, which prompted changes passed in the Dodd-Frank Act of 2010.[31] But they have maintained their central role as creators of key information.

For credit information about individuals, legal rules were put in place to govern how such information could function. Explicit usage of some information, like the race of the borrower, was forbidden. The Fair Housing Act of 1968 outlawed discrimination in home mortgage lending and prohibited 'disparate treatment' in real estate credit transactions. Consumer credit was regulated by Equal Credit Opportunity Act of 1974, which also prohibited discrimination on the basis of protected classes including race, religion, sex, and marital status. Thus, although certain kinds of information about consumers could readily be collected (eg their race, sex, age, etc), conditioning the extension of credit on that information was problematic. And consumer credit ratings were covered by the FCRA of 1970, which set standards for how information could be collected, stored, consulted and presented in a consumer credit report. Among other things, FCRA stipulated that credit information could only be shared with designated parties who had a legitimate business reason to obtain it. At first, however, rating agencies had no obligation to share their information with subjects, nor to ensure that the information was accurate.

Ample research shows that the Fair Housing Act and the Equal Credit Opportunity Act failed to erase discrimination in credit markets and in practice lenders continued to use information about race and gender.[32] Additional laws were passed, like the Home Mortgage Disclosure Act of 1975 and the Community Reinvestment Act of 1977, but these did not solve the problem either. Unequal access persisted, partly because many people did not have a substantial credit record, or because they

31 On the inefficacy of these regulatory changes, see Giulia Mennillo and Timothy J Sinclair, 'A hard nut to crack: regulatory failure shows how rating really works' (2019) 23 Competition and Change 266.

32 Devah Pager and Hana Shepherd, 'The sociology of discrimination: racial discrimination in employment, housing, credit, and consumer markets' (2008) 34 Annual Review of Sociology 181; Chloe N Thurston, *At the Boundaries of Homeownership: Credit, Discrimination, and the American State* (Cambridge University Press 2018).

lived in areas that were 'under-banked'. FCRA was updated to ensure that consumers could know the content of their own credit reports and would have some recourse when that content was inaccurate. In general, the legal arrangements governing the generation and deployment of credit information at the end of the twentieth century were imperfect at best, even as such information remained critical to the operation of credit markets. But now, a dramatically new set of circumstances threatens to destabilise these arrangements even more.

BIG DATA TODAY

Online commerce, internet usage, widespread adoption of mobile phones, and social media saturation have now created vast depositories of detailed information about billions of individuals, largely in the hands of a small number of very large tech firms. How to exploit big data for financial purposes is an ongoing project, but the scope and frequency of measurement now goes far beyond what might have been envisioned in a 1980s-era credit report. Nevertheless, the fundamental puzzle remains: how to predict the creditworthiness of persons and firms? How to resolve uncertainties faced by lenders and investors? And the generic answer to this puzzle also remains: gather more information.

What has changed is the volume, variety and velocity of information (number of variables, number of cases, frequency of measurement), which now exceed human comprehension. Thus, data analysis is increasingly done via ML and AI, and substantial amounts of modelling, interpretation and simplification are necessary before putting information before human eyes.[33] ML and AI algorithms search for patterns and optimise pre-specified outcomes, and users hope that information newly analysed is predictive of outcomes that interest them: will a borrower default on a loan? What is the likelihood of repayment? How profitable might a particular customer be to the lender? Such questions are being answered using non-traditional information, ie data that does not come from an ordinary credit report. Berg et al find that several readily accessible 'digital footprints' significantly augment traditional credit variables in predicting the likelihood of default.[34] These include features like the subject's computer operating system (Apple's iOS is better) and hardware (desktop computer, laptop, tablet or mobile phone), keystroke errors, and whether the subject's personal name is contained in their email address. Jagtiani and Lemieux list

33 Witness the growing importance of 'data visualization' techniques.

34 Tobias Berg et al, 'On the rise of FinTechs: credit scoring using digital footprints' (2020) 33 Review of Financial Studies 2845.

a number of features that fintech firms exploit, but which are not in credit reports, including bill payment histories, medical and insurance claims, education, social networks, and so on.[35] But there are millions more variables, waiting to be 'mined' for their value in predicting outcomes. The spectrum of accessible data and what it measures is now much wider than before. And the statistical associations that large-scale data analysis uncovers may not be intuitively obvious even if they are predictive (who knew that use of iOS made a difference?). Unexpected associations may mean that a previously overlooked relationship has been unearthed, but it can also reflect spurious correlation.

As the statistical model-building becomes elaborate and automated, the models become increasingly opaque, and even incomprehensible, to humans. Complex models involving millions of variables can deliver better results, but when these are used to inform credit decisions, it is difficult to explain the outcome in any straightforward manner, and such inexplicability presents a regulatory challenge.[36] Opaque algorithms readily baffle and stymie human subjects, and even experts may not understand their own digital tools.[37] When a loan officer consults an applicant's traditional credit file, finds a history of defaults and then denies the loan, it is easy to justify the adverse decision: the individual's payment record had too many blemishes, and those were visible both to the loan officer and the applicant. Furthermore, how the applicant might improve their chances of receiving a loan is also obvious: avoid blemishes. But if a complicated algorithm determines that an applicant is too great a risk and should be denied a loan, there is no easy way to explain how the decision was reached. The analytical process is a black box, and those whose applications were denied may well be unsatisfied with a rationale that amounts to saying: the computer decided. This is particularly problematic since compliance with FRCA requires firms to provide consumers with an 'adverse action' notice if consumer report

35 Julapa Jagtiani and Catharine Lemieux, 'The roles of alternative data and machine learning in fintech lending: evidence from the LendingClub consumer platform' (2018) Federal Reserve Bank of Philadelphia Working Paper Series WP 18-15.

36 Bryan Casey, Ashkon Farhangi and Roland Vogl, 'Rethinking explainable machines: the GDPR's 'right to explanation' debate and the rise of algorithmic audits in enterprise' (2019) 34 Berkeley Technology Law Journal 143; Talia B Gillis and Jann L Spiess, 'Big data and discrimination' (2019) 86 University of Chicago Law Review 459, 474.

37 Hatim Rahman, 'The invisible cage: workers' reactivity to opaque algorithmic evaluations' (2021) Administrative Science Quarterly 3, 8; Callen Anthony, 'When knowledge work and analytical technologies collide: the practices and consequences of black boxing algorithmic technologies' (2021) 66 Administrative Science Quarterly 1173.

information is used to deny access to credit, employment, insurance or some other service.[38]

Similar problems arise in other settings. For example, the financial services industry is turning to 'chat bots' as a way to offer cheap large-scale advice to clients.[39] Instead of a face-to-face meeting with a human financial advisor, the client interacts with a natural language processing algorithm that dispenses financial advice. From the standpoint of the service provider, this is much cheaper and readily scalable. And an algorithm presumably has the advantage of being even-handed and bearing no animus. Yet, if a client seeks to know why they have received a particular piece of automated advice, or why some alternative investment strategy was not recommended, it may be difficult to offer a meaningful explanation. The operation of an opaque algorithm is not easy to explain.

Big data creates big problems. The last several years have witnessed multiple instances where repositories of information have been breached and their contents stolen. The stakes of cybersecurity are high indeed when hackers can seize highly personal information about hundreds of millions of individuals in a single hack.[40] Among other things, these kinds of breaches increase the possibility of large-scale identity theft even as compliance with anti-money-laundering (AML) and know-your-customer (KYC) laws require financial institutions to determine the identity of their clients. The portability of electronic information is one of its great virtues, but this feature also facilitates its theft. Furthermore, critical information systems can fail through a denial-of-service (DoS) attack, or be held hostage to ransomware. Legitimate users can be 'phished', so that they inadvertently provide confidential information like passwords or other identifiers. And some data subjects wish 'to be forgotten', ie to have their past digital footprints completely erased. That way, evidence of wayward youthful behaviour or inappropriate expressions, richly documented on Instagram and Twitter, will not haunt an individual for the rest of their life. Generally, the legal responsibilities of electronic information holders have not caught up with current realities, and this remains an area of consequential flux. Firms concerned about potential liabilities can now obtain 'cyber insurance', but not all relevant cyber-risks are

38 Federal Trade Commission (n 2 above) 14.

39 Tom Baker and Benedict Dellaert, 'Regulating robo advice across the financial services industry' (2018) 103 Iowa Law Review 713; Allen et al (n 12 above) 29.

40 David Maimon and Eric R Louderback, 'Cyber-dependent crimes: an interdisciplinary review' (2019) 2 Annual Review of Criminology 191.

insurable, and the adoption of firewalls', anti-virus software, secure passwords, and duo-factor authentication is no guarantee of security.[41]

The problem worsens when information passes quickly through many hands. Data aggregation has become a common practice in the tech industry, and many companies turn to vendors to supply both data and analytical services (rather than develop such capabilities internally). Firms known as 'data brokers' specialise in collecting and pooling information from multiple sources, and then providing it to clients. For example, a newsfeed from one of the wire services could be merged with government economic statistics, meteorological data, and Twitter postings to make predictions about demand for portable generators or home equity loans in a particular region, and then to send out targeted advertising on social media to potential buyers and borrowers, or to advise potential sellers and lenders. Much of this tracks individuals who have no idea of the scope of information that has been gathered about them, and who have no easy way to learn its extent or its provenance.[42] A welter of private contracts govern these activities, and often stipulate who owns data, or who may license its use for a period of time. The contracts rarely address the accuracy of the information, nor do brokers reliably ensure that their clients conform to the terms of use.[43] And the high volume of exchange among brokers would make it hard for subjects to identify erroneous information about themselves, or the source of the problem, and have it corrected. These arrangements are not subject to rigorous public oversight, or indeed any oversight at all.

Most data subjects 'consent' to use of information about themselves through end-user-agreements that insufficiently inform them about what can or will be done with such information. These agreements are typically standard-form contracts offered on a take-it-or-leave-it basis: to use software or an internet platform service, for example, the user must accept the terms dictated to them. With each new software release, the terms are updated and modifications are easy to overlook. Frequently, the service is offered 'free' to the user, so it will appear to be a good deal. A combination of economies of scale and network externalities make it hard for users to find viable alternatives, so to obtain the service they must accept the terms as given. But what users fail to appreciate, and what they are not told, is how much monetisation of the data streams created by use of the platform will benefit the

41 Shauhin A Talesh, 'Data breach, privacy, and cyber insurance: how insurance companies act as "compliance managers" for businesses' (2018) 43 Law and Social Inquiry 417.

42 Federal Trade Commission, *Data Brokers: A Call for Transparency and Accountability* (Washington DC 2014) vii, 14.

43 Ibid 17, 41.

host company: by contributing content, users enable the platform to make money. Nor do they appreciation the frequency with which their information will be shared widely for any number of purposes. Issues of privacy, data ownership or data security are pushed to the side as aggregators strive to discover new ways to monetise the information they assemble, and the consent they obtain from data subjects is inadequately informed.[44]

Sometimes, individuals become data subjects without consent. Social media platforms vacuum up so much information that they can develop 'shadow profiles' about people who are not users and who therefore did not consent to the terms of use.[45] Such non-users might be, for example, the mutual friends of users, who show up in the list of contacts that the users uploaded onto the platform. Their names, phone numbers, postal and email addresses will become known to the platform. Non-users may be identified in the photos that users like to share, and their images included in facial recognition software. Time-stamped and geo-coded pictures ascertain time and place for the physical movements of users and non-users alike.

It took decades for the legal status of credit ratings and reports to settle in the late nineteenth century, as the judicial system grappled with the problems posed by (then) unprecedented amounts of credit information. A wave of regulation occurred in the 1960s, when policymakers recognised the significance of personal credit information and the potential for discrimination. The current period of expansion and innovation poses a new set of challenges, and again the legal/regulatory system struggles to catch up.

BIAS AND BIG DATA

The incompleteness of legal rules is particularly problematic for how information affects discrimination in markets. Data aggregators, like other tech firms, do not fit the strict definition of the credit rating agencies regulated by FCRA and so escape its oversight. Yet, increasingly, their informational products bear directly on credit markets. Similarly, the information in which they traffic is used by others for employment decisions, but since they themselves are not making the actual decisions, their obligations under Title VII of the Civil Rights Act are unclear. Antidiscrimination laws prohibited lenders from basing decisions on an applicant's race, sex, age, marital status,

44 Sylvia Zhang, 'Who owns the data generated by your smart car?' (2018) 32 Harvard Journal of Law and Technology 299.

45 Nicholas Diakopoulos, *Automating the News: How Algorithms are Rewriting the Media* (Harvard University Press 2019) 214.

or other protected category. One of the ostensible virtues of a computer algorithm is that it does not bear animus against people because of their race, gender, nationality, religion or other personal characteristics.[46] But does this mean algorithms are unbiased?[47] How to be sure that an automated decision does not turn on any of these features? The obvious solution is to exclude measures of race, sex, age, etc from the data upon which the algorithm operates. But in the context of big data, this is not enough. If there are variables included in the dataset that are correlated with any of these protected categories, singly or in combination, then an algorithm could discriminate in effect.[48] Given the opacity of the modelling process, it would be extremely difficult for an observer or regulator to know if such discrimination were occurring. For starters, algorithms are usually proprietary: they are part of the intellectual property belonging to the fintech firm. In addition, many of these algorithms are 'trained' on proprietary datasets. If the variables include geographic measures (postal codes, street addresses, or geocodes) then given the high level of residential segregation in most US communities it would be very easy to measure race indirectly. Similarly, given the homophilous nature of informal social networks, calculating an individual's social media connections could provide a proxy measure for race (or any number of other characteristics).[49]

The use of a broader set of information to make credit decisions, beyond the traditional credit report, makes it challenging to comply with rules prohibiting discrimination. And yet, exploitation of 'alternative information' also holds out the possibility of greater inclusion, faster decisions, and the extension of credit and financial services to the millions of 'unbanked' individuals.[50] A fintech lender can consider an applicant's on-time rental payments (which do not appear in a traditional credit record), their educational credentials, online behaviour, internet browser history, or information about an applicant's friends and associates.[51] Fintech may be able to exploit

46 Matthew Adam Bruckner, 'The promise and perils of algorithmic lenders' use of big data' (2018) 93 Chicago-Kent Law Review 2, 5.

47 Eirini Ntoutsi et al, 'Bias in data-driven artificial intelligence systems – an introductory survey' (2020) 10 WIREs Data Mining and Knowledge Discovery 1.

48 Gillis and Spiess (n 36 above) 464, 469.

49 Miller McPherson, Lynn Smith-Lovin and James M Cook, 'Birds of a feather: homophily in social networks' (2001) 27 Annual Review of Sociology 415.

50 Bruckner (n 46 above) 6, 18.

51 General Accounting Office, *Financial Technology: Agencies Should Provide Clarification on Lenders' Use of Alternative Data GAO-19-111* (Washington DC 2019) 33, 34; Congressional Research Service, *Alternative Data in Financial Services CRS IF11630* (Washington DC 2020).

opportunities that have been overlooked by traditional financial institutions.[52]

The necessary use of historical data to 'train' an algorithm risks reproducing historical biases. The general procedure is for some optimisation algorithm (eg one that identifies the most creditworthy borrowers) to be developed on an existing dataset, and then applied to new applications as they are submitted. Development usually involves estimation of parameters and coefficients that best link input information with some outcome that the developers care about (eg minimising loan defaults), and the bigger the dataset, the better. However, if biases have operated historically, for example if home mortgages were in the past extended in a discriminatory fashion, then the algorithm may well reflect those historical biases and reproduce them when applied to new loan applications. And because of the opacity of the algorithm, such bias may be hidden from those who use it. Safiya Noble gives the example of the Google search engine, trained on the billions of searches done by Google users to develop its 'auto-complete' algorithm (which offers suggestions to the user for how to complete their search phrase).[53] Because of racial biases in the user population, certain search phrases were 'auto-completed' in a racially biased manner, until the offensive pattern was called to the attention of Google, and its algorithm was modified. Unfortunately, algorithmic bias is seldom as obvious as it was for the auto-complete feature of Google. Another type of bias can arise when the training dataset itself is skewed, under-representing some population subgroups and over-representing others. If so, the algorithm may be good at estimating some associations, but bad at others, and will inadvertently misrepresent minority populations.

An additional complication stems from the fact that, as information from different sources gets aggregated, it is also being put to new uses. Often, data gathered for one purpose can be redeployed in an entirely different direction, and in a manner that evades existing rules. This means, for example, that a big tech firm getting involved in the provision of financial services is not necessarily subject to the regulations that normally govern banks because it was not founded as a bank and does not take deposits.[54] Or consider that a firm that harvests data about

52 Julapa Jagtiani and Catharine Lemieux, 'Do fintech lenders penetrate areas that are underserved by traditional banks?' (2018) Federal Reserve Bank of Philadelphia Working Paper Series WP 18-13; Jagtiani and Lemieux (n 35 above).

53 Safiya Umoja Noble, *Algorithms of Oppression: How Search Engines Reinforce Racism* (New York University Press 2018).

54 Xavier Vives, 'Digital disruption in banking' (2019) 11 Annual Review of Financial Economics 243.

online search behaviour and provides it to employers (who use it for their hiring decisions) may not be aware of how antidiscrimination standards like 'disparate impact' work. The dramatic repurposing of information renders older forms of regulation less relevant because it puts data in the hands of organisations that escape oversight or for whom compliance is unfamiliar.[55] One of the requirements of FCRA is that consumers are entitled to see the contents of their credit file at least once a year. This measure allows individuals to ensure the accuracy of fateful information about themselves. Yet, as alternative information becomes increasingly important in credit decisions, and as its volume and opacity grow, annual disclosure to the individual becomes less and less useful. What is an ordinary individual to make of a deep neural net model built out of millions of variables that governs their access to home equity loans? How to indicate the decisive information that led a lender to reject their loan application?

The discussion thus far has focused on how the rise of big data changes the volume and use of information about debtors, whether they are individuals or firms. As compared to the past, much more can be known about debtors and potentially it flips the traditional asymmetry between the two sides. In the market-for-lemons model, debtors know their own willingness and ability to repay but their creditors do not. Increasingly, however, creditors know more about debtors, even to the point where they know more than debtors do about themselves. This change presumably means that lenders are becoming much better at identifying truly creditworthy borrowers, including ones that previously would have been overlooked, although it raises thorny issues about privacy and non-discrimination.

BIG DATA AND COLLATERAL

Security is another key component of credit. In order to reduce their vulnerability, many lenders insist not only that the borrower have a good credit record, but also that the borrower provide collateral so that in the event of a default, the lender can seize the debtor's asset and use it to recover the unpaid balance of the debt. The collateral stays in the possession of the borrower for the duration of the loan, and so is available for use, but the lender has a security interest. Collateral has two effects: the possibility of its loss provides an incentive for the debtor to repay, and in the event the debtor does not do so, its liquidation helps to compensate the creditor. In the past, secured loans

55 Mark T Andrus, 'The right to be forgotten in America: have search engines inadvertently become consumer reporting agencies?' (2016) May Business Law Today 1.

usually involved tangible assets like land, buildings, or large durable goods (eg automobiles). If the borrower defaulted on their home mortgage, for example, the bank could seize the home and sell it, using the proceeds to cover its losses. The mortgage identified the specific piece of property that functioned as collateral using information from a public land registry, which ensured that the borrower had clear title. Or if someone defaulted on their car loan, the finance company would repossess the car, knowing that a specific vehicle collateralised the loan because each car had a unique VIN (vehicle identification number). Registration of a security interest also ensured that lenders would know of any prior or senior liens and could adjust the terms of their loan accordingly.

New information capabilities create the possibility of expanding secured lending because it is becoming easier to register and track large numbers of valuable assets.[56] With a suitably elaborate information infrastructure in place, highly mobile, numerous, dynamic assets can be identified, registered, and tracked reliably enough that they can serve as collateral.[57] The 'internet of things' holds out the possibility that even mundane personal items can be tracked electronically and so can function like pawns in a pawnshop (except that they remain in the possession of the debtor).[58] In principle, the expansion of collateral could encourage more lenders to lend, knowing that they have been able more effectively to minimise their risks.

Despite this potential, the success of electronic registries is not assured. The case of MERS (the Mortgage Electronic Registration System) offers a sobering reminder that new informational infrastructures can face unexpected dysfunctionality. MERS was created in the 1990s as a private membership organisation to track home mortgages. With the development of securitisation, lenders moved away from the 'originate to hold' model and towards an 'originate to distribute' model. In the past, mortgage lenders typically held the debt until maturity, on their balance sheets. With the loan secured by real estate, they possessed the right to seize collateral in the event of a default and would register their security interest with a public administrative agency (often the Secretary of State's office). Securitisation meant that large numbers of home mortgages were transferred to new ownership (perhaps to a special purpose entity),

56 Jacob Muirhead and Tony Porter, 'Traceability in global governance' (2019) 19 Global Networks 423.

57 Roy Goode, 'Asset identification under the Cape Town Convention and Protocols' (2018) 81 Law and Contemporary Problems 135; Charles W Mooney Jr, 'fintech and secured transactions systems of the future' (2018) 81 Law and Contemporary Problems 1.

58 Samuel Greengard, *The Internet of Things* (MIT Press 2015).

pooled together, and new securities were issued against that pool of assets. Securitisations became more complicated as different tranches were issued against the pool, varying by seniority. Nevertheless, it remained essential to track who held the lien, and therefore who had the right to foreclose on a defaulting mortgage, even when mortgages were blended together, repackaged in order of priority, and then distributed to multiple investors.

It was the purpose of MERS to track security interests through all the financial engineering. As growing numbers of mortgages changed hands, during the securitisation process and later in secondary market transactions, it was difficult and expensive to register every transfer with the public authorities. Instead, MERS as an entity became the nominal mortgage holder in relation to the outside world, and internally MERS tracked exactly who among the members held which rights over which mortgage.[59] As massive numbers of homeowners defaulted on their mortgages in 2008 and 2009, secured lenders moved to assert their rights and begin foreclosure. But in a significant number of legal cases, judges in different states refused to recognise their claims and ruled that the assertion that MERS operated as a kind of unchanging nominee on behalf of a changing group of lenders and their assignees was defective. MERS indeed kept track of the transfer of mortgages among its membership, but did not do so in a way that was recognised by the courts, and so foreclosure rights were not properly transferred. When creditors could not foreclose, the MERS system had clearly failed to function as its architects had intended, and one of the basic protections for creditors did not work.

The MERS experience showed how an innovative tracking system based on new information technologies could completely malfunction under pressure. Despite all the advantages of shifting from paper to electronic files, notwithstanding the ambition to reduce creditor costs, this system failed to articulate with the legal system in a manner that dependably supported the legal rights that creditors believed they possessed. Creditors thought they could foreclose on a mortgage in default, but they could not. Clearly, as finance moved to exploit new information technologies, including big data, it was critical to remain firmly anchored in the legal system. Financial claims have little manifestation except through law, so if their legal efficacy disappears, so does their value.

---

59 David P Weber, 'The magic of the mortgage electronic registration system: it is and it isn't' (2011) 85 American Bankruptcy Law Journal 239; Laura A Steven, 'MERS and the mortgage crisis: obfuscating loan ownership and the need for clarity' (2012) 7 Brooklyn Journal of Corporate, Financial and Commercial Law 251.

CONCLUSION

New information technologies have produced an increase in the volume, velocity and variety of information that prompts some to suggest that we are in a new era of surveillance capitalism. Financial markets are particularly sensitive to such developments because of their dependence on information. Financial relationships involve uncertainty and vulnerability in that one party's fate depends on another's future actions. Participants therefore gather information so they can anticipate the future and seek better outcomes. They reduce their vulnerability by exploiting new informational capabilities to earmark assets and collateralise loans more broadly than in the past. And if they cannot guarantee a positive outcome, when held to account they can at least show they tried to manage the uncertainties and vulnerabilities.

Financial market participants do not always create information for themselves. Frequently, they acquire it from a third party, who is neither the subject nor the user of that information, but whose interests shape its production, distribution, and format. The acute demand for information means that financial market participants have been among the earliest adopters of the most advanced information technology, quickly embracing the postal system, telegraph, telephone, computer, and internet as these became available.

Although information has increased in volume, it also varies by source, format, content and use. To view change as exclusively quantitative is to overlook much of significance. Information can be bespoke or highly standardised. Its provenance may be public, or private. It may consist of qualitative classifications or quantitative measurements, and its format has been as much shaped by historical precedent as by the demands of users. Information may come with substantial legal obligations, or none at all. The legal status of information has varied, changing over time and depending on its usage. And contrary to the efficient markets hypothesis, many act as if market prices did not fully summarise all available information. Financial market participants are interested in prices, to be sure, but they are always interested in many other kinds of information as well.

Information continues to play a central role in contemporary markets. But the latest big data information technology, captured by the idea of surveillance capitalism, poses new challenges, particularly in the area of consumer finance. The US's existing legal and regulatory framework is strained by the volume, variety, speed and ubiquity of information, and its use in unanticipated ways. The inadequacy of the 'user consent' model, which relies on standard-form agreements to obtain 'informed' consent from data subjects, is now apparent. The billions of users who generate online data have no way to comprehend

how data are being used or by whom. Nor do they appreciate their exposure to privacy violations or cybersecurity risks. Their consent is largely fictitious, ill-informed, and ceremonial. Some usages of information are legally restricted so as to prevent discrimination in contexts like employment or credit. But as alternative data becomes increasingly important, as proxy measures become readily available, as 'black box' algorithms play more of a role, and as information is repurposed for use in new contexts, existing legal restrictions become less effective. Who owns big data, as opposed to who controls it, remains an important unanswered question. Should private property be the default, or is it better to circumscribe and maintain an informational commons? How to make algorithms accountable for the decisions they render? Should the software engineers who write code be accountable? How to ensure that AI and ML algorithms do not unfairly discriminate against protected groups? Much more deliberation is required before these questions can be properly resolved.

Incumbent financial institutions feel the effects of big data. Upstart fintech firms do not usually qualify as banks, but on the loan side they are undertaking activities traditionally dominated by banks. Fintech's ability to exploit alternative data enables them to identify borrowers who were overlooked by traditional lenders. And if fintech firms lend, instead of providing a platform between lenders and borrowers, they will have to comply with know-your-customer regulations that target money-laundering and terrorism financing. The big tech firms, which already possess big data and know how to exploit it, could offer a range of financial services to their large user bases, and would pose a serious threat to incumbent banks. Among other things, their provision of payment services and other media of exchange would weaken the ability of central banks to control the money supply using their traditional policy instruments.

Some organisations appear to be unthreatened by these changes, including some at the very centre of information production and distribution. The bond rating agencies, for example, continue to produce a distinctive type of categorical information and play a central role in global financial markets, despite their US origins and even though their failures during the 2008 global financial crisis were widely noted and criticised. Attempts to create rival rating agencies outside of the US have failed, and their part in long-term capital allocation, structured finance, OTC financial derivatives markets, and prudential regulation seems largely unaffected by surveillance capitalism.[60]

60 Eric Helleiner and Hongying Wang, 'Limits to the BRICS' challenge: credit rating reform and institutional innovation in global finance' (2018) 25 Review of International Political Economy 573; Mennillo and Sinclair (n 31 above).

In similar fashion, the rating organisations for individual credit (eg TransUnion) also seem relatively secure. They were already in the big data business, and so it is relatively easy for them to partner with fintech startups and find ways to improve their credit-scoring formulae by adding alternative variables to their models. Furthermore, the discovery of new 'off-label' uses for consumer credit scores helps to expand demand for their products. Since these scores directly shape the life chances of millions of individual consumers, when regulators confront the problems created by big data, new regulations will quite likely affect how the credit rating agencies operate.

Zuboff claims that a distinctively new era of surveillance capitalism poses unprecedented challenges and opportunities. But in some respects, panoptic surveillance of and by the capitalists populating the US financial system has been underway since the mid-nineteenth century. The widespread adoption and exploitation of cutting-edge information technology to address uncertainty and reduce vulnerability in a market setting is not a recent invention, nor are the associated legal and regulatory challenges. The historical experience underscores the dynamism and complexity of information as it diffuses and gets applied in new and unexpected ways. Instances of deep institutionalisation, where particular types of information are incorporated into basic structures of market governance, ensure that these utilisations survive the passage of time and surmount the shocks induced by economic crisis. It further suggests that regulatory interventions can make a difference, but also that measures tied too strictly to inflexible rules will likely be circumvented by innovative market actors. The traditional belief that 'more is better' can be problematic in situations where sharp information asymmetries exist and 'too much information' can easily overwhelm individuals subject to bounded rationality. Mandatory disclosure as a regulatory intervention seldom levels the playing field. In fact, much depends on the qualities of information, and its place in the architecture of decision-making, not just on its quantity. The new world of big data has been announced with dramatic claims about its novelty, but key parallels with the past offer a way to see past the hype.

Northern Ireland
Legal Quarterly
Winter Vol. 72 No. 4 (2021) 799–804
Commentaries and notes DOI: 10.53386/nilq.v72i4.948

Informality, conditionality and property rights in European economic governance: Case note to CJEU *Council v K Chrysostomides & Co and Others*

Guido Comparato[1]

Birkbeck University of London
Correspondence email: g.comparato@bbk.ac.uk

BACKGROUND

As the Eurozone crisis which started in 2009 revealed the flaws in the legal framework of EU economic governance, an informal intergovernmental approach emerged in Europe to deal with the emergency.[2] Notably, the European Stability Mechanism (ESM) was created by international agreement to overcome the limitations imposed by the European Union (EU) no-bailout clause,[3] while the Treaty on the Functioning of the European Union (TFEU) was amended to explicitly permit the granting of financial assistance to preserve the stability of the euro area subject to strict conditionality.[4] At the same time, the Euro Group – the highly informal meeting of the finance ministers of European countries plus the EU Commission and generally the European Central Bank (ECB) – emerged as a key player in the management of the crisis, becoming the forum where several austerity measures were discussed among finance ministers of countries whose currency is the euro. Yet, various contentious aspects of that approach – lack of accountability, opacity, and the problem of strict conditionality – attracted more than one criticism in particular in what concerns the possibility of exerting legal control over the decided measures. Famously, when the Republic of Ireland requested financial assistance, the Irish Supreme Court asked whether the amendments made to the Treaties with regard to the ESM were lawful. Even if in *Pringle* the Court of Justice of the EU (CJEU)

1 Senior Lecturer in Law at Birkbeck, University of London, United Kingdom.

2 On these developments, see Kaarlo Tuori and Klaus Tuori, *The Eurozone Crisis. A Constitutional Analysis* (Cambridge University Press 2014).

3 TFEU, art 125.

4 European Council Decision 2011/199/EU of 25 March 2011 amending article 136 of the Treaty on the Functioning of the European Union with regard to a stability mechanism for Member States whose currency is the euro [2011] OJ L91/1.

answered the question in the affirmative,[5] the conditions imposed on countries in consideration for financial aid remained controversial. Private individuals and companies brought actions lamenting that the measures aimed at solving the crisis violated their property rights. The case of *Chrysostomides*, considered in this brief note, is a recent and notable example of such judicial challenges against the backdrop of the principle of conditionality and of the increased informality of EU economic governance.

The case takes its roots in the debt crisis which affected Cyprus and, even before that, Greece. When Greece entered into financial difficulties and the International Monetary Fund, the EU Commission and the European Central Bank (the 'Troika') were involved, a haircut on Greek government bonds was decided. Despite being harshly criticised as a blatant violation of the sanctity of contracts and of the property rights of investors, that intervention was deemed lawful by no less than the European Court of Human Rights.[6] The solution nonetheless shifted the economic losses onto international investors, possibly transferring instability from one country to another – or, more correctly, aggravating the existing instability of some countries – and thus made new extraordinary measures necessary. This was particularly the case of Cypriot banks which happened to hold large amounts of Greek government debt. As the crisis spread from the private to the public sector, Cyprus presented a request of assistance to the President of the Euro Group, who confirmed that the ESM would intervene to offer assistance in exchange for reforms to be agreed in a memorandum of understanding (MoU) signed by Cyprus and the Commission on behalf of the ESM. It should be noted in this regard that the composition of the Euro Group and of the ESM's Board of Governors are largely and for most practical purposes the same. The agreed measures included the restructuring of the two main banks of the Mediterranean island in line with the new principle of bail-in, which now required shareholders, bondholders and uninsured depositors of distressed banks to bear the costs of bank resolution. The intervention in the Cypriot banking sector thus translated into economic losses to be borne by some individuals who, in an attempt to recover part of the money lost, brought action against the EU. Is the EU liable for those losses? The question was addressed initially by the General Court of the CJEU in two decisions of 13 July 2018, *K Chrysostomides & Co and Others v Council and Others*, T-680/13, and *Bourdouvali and*

5 C-370/12 *Thomas Pringle v Government of Ireland and Others* [2012] ECLI:EU:C:2012:756 (CJEU).

6 ECtHR, *Mamatas and Others v Greece*, App nos 63066/14, 64297/14 and 66106/14, judgment of 21 July 2016.

Others v Council and Others, T-786/14 and, after those judgments were appealed, by the Grand Chamber of the CJEU in Joined Cases C-597 & 598/18 P, C-603 & 604/18 P, *Council v K Chrysostomides & Co and Others*, decided on 16 December 2020.

THE DECISION

To introduce the judgment, one needs to take into account the case law of the CJEU attempting to extend the reach of EU law in consideration of the fact that the ESM developed outside of the EU legal framework. In the *Ledra Advertising* case, the CJEU did so by recognising, building upon *Pringle*,[7] that even when it signed an MoU – which remains outside the scope of EU law – the Commission as the 'guardian of the Treaties' is bound by the respect of fundamental rights as sanctioned in the Charter – including the right to property – and should therefore refrain from participating in an act which might infringe those rights.[8] The decision is important since it endeavoured to extend the reach of EU fundamental rights, yet the court built upon a long tradition in the interpretation of the limitations to the right to property, recognising that such right is not absolute and that proportionate limitations to it, taken in the public interest, are in fact justified. Thus, the court ruled that the MoU – as a non-EU act – could be annulled, but accepted that an unlawful conduct by the Commission or the ECB[9] while signing the MoU may give rise to non-contractual liability by the EU, therefore opening the gate to challenges based on this ground.

In *Chrysostomides* the question was therefore addressed whether the EU has non-contractual liability towards private individuals who suffered losses because of the restructuring of the Cypriot banking sector due to decisions taken in particular by the Euro Group. In order to establish this, two fundamental issues – among others which due to space constraints cannot be considered here – had to be addressed: whether the Euro Group is an EU institution in the first place and whether it engaged in an unlawful conduct consisting in a sufficiently serious breach of a rule of law intended to confer rights on individuals.

---

7 On that occasion, the CJEU noted that it is apparent from art 13(4) of the ESM Treaty that 'the Commission is to check, before signing the MoU defining the conditionality attached to stability support, that the conditions imposed are fully consistent with the measures of economic policy coordination' provided for in the EU Treaties, para 112.

8 C-8/15 to C-10/15 P *Ledra Advertising* [2016] ECLI:EU:C:2016:701 (CJEU), para 59.

9 On this, see T-107/17 *Steinhoff* [2019] ECLI:EU:T:2019:353 (General Court).

In the first instance, the General Court held that the Euro Group does qualify as an EU institution.[10] This is because the Group is explicitly mentioned in article 137 TFEU and Protocol 14 but also because, reasoning in terms of effective judicial protection:

> [a]ny contrary solution would clash with the principle of the Union based on the rule of law, in so far as it would allow the establishment, within the legal system of the European Union itself, of entities whose acts and conduct could not result in the European Union incurring liability.[11]

Nonetheless, the substantive point concerning the violation of the right to property did not yield better results for the applicants in the first instance in *Chrysostomides* than it did in *Ledra Advertising*.

On appeal, and following the opinion of Advocate General (AG) Pitruzzella,[12] the CJEU overruled the judgment by the General Court and held that the Euro Group is in fact intended as a merely informal meeting, serving the function of a bridge between the EU and the national level. If an EU institution in the sense of article 340 TFEU must have been established by the Treaties and be intended to contribute to the achievement of the EU's objectives, then the Euro Group cannot qualify as such because, even if it is referred to by the Treaties, it was not also established by them.[13] What is more, as also emphasised by the AG, legislative history shows that the EU never intended to formalise the Group, as it rather decided to maintain it as an informal coordination forum.[14] The CJEU therefore built upon its precedent in *Mallis*, when it already held that the Euro Group 'cannot be equated with a configuration of the Council or be classified as a body, office or agency of the European Union within the meaning of Article 263 TFEU'[15] and denied on that occasion that the mere statement in which the Euro Group indicated that it had reached an agreement with Cyprus on the key elements of a macro-economic adjustment programme could be annulled.

In what concerns the substantive argument as to the violation of property rights by actions of the Council, the Commission and

10 T-680/13 K. *Chrysostomides & Co and Others v Council and Others* [2018] ECLI:EU:T:2018:486 (General Court), para 113.

11 Ibid 114.

12 For a critical analysis of the Opinion, see Menelaos Markakis and Anastasia Karatzia, 'The Eurogroup and effective judicial protection in the EU: Chrysostomides' (*EU Law Live* 15 June 2020)

13 C-597 & 598/18 P, C-603 & 604/18 *P Council v K Chrysostomides & Co and Others* [2020] ECLI:EU:C:2020:1028 (CJEU), para 90.

14 Ibid, Opinion of AG Pitruzzella, para 100.

15 C-105/15 P to C-109/15 *P Konstantinos Mallis* [2016] ECLI:EU:C:2016:702 (CJEU), para 61.

the ECB, the CJEU confirmed that no violation had taken place, reiterating its case law on the fact that property is not absolute and limitations to it are allowed within limits, explicitly referring in this regard to its previous decision in *Ledra Advertising*. In that circumstance, the justification for the restrictions was found to be the need to achieve financial stability – which is now developing as an overarching objective in the EU legal order.[16] A further ground of appeal concerned alleged discrimination, as the appellants lamented that they had been subject to a more detrimental treatment than other creditors and even other depositors within the same bank – ie those whose deposits did not exceed the secured threshold of €100,000. The argument was nonetheless dismissed by the court, which found that the situations were objectively different, thus justifying a diversified legal treatment.[17]

SIGNIFICANCE

Besides its immediate relevance in providing a straightforward answer to the question about the legal nature of the Euro Group, the case is significant in the context of the relationship between law, power and economics in times of crisis. In a broad sense, the case concerns the possibility of exerting legal control on the increasingly informal and intergovernmental approach to European economic governance and the margins for private individuals to challenge decisions which, while being aimed at restoring financial stability, might encroach upon their rights even of a constitutionalised nature.

If the intergovernmental approach to the resolution of the euro crisis sparked criticisms and legal controversy, the informality and opacity of the Euro Group offered particular reasons for concerns, since it appeared that some countries and actors might use that informality to impose controversial reforms on indebted countries. While officially the Group is meant as a forum for finance ministers to meet 'to discuss questions related to the specific responsibilities they share with regard to the single currency',[18] in practice – as put by Varoufakis in his provocative account of what happened behind closed doors in the days of the Greek crisis – 'a reasonable and impartial spectator might easily have concluded that the purpose of the Eurogroup is for the ministers to approve and legitimise decisions that have already been taken by the

16 See Gianni Lo Schiavo, *The Role of Financial Stability in EU Law and Policy* (Kluwer 2017).

17 *Chrysostomides* (n 13 above) paras 191–208.

18 TFEU Protocol (No 14) on the Euro Group, art 1.

[Troika]'.[19] The Cypriot case, in which the solution of bail-in was first tested, became notorious in this regard.[20]

In this context, the formalisation of the Euro Group could extend judicial protection because sufficiently serious breaches of EU law could at least trigger the EU's non-contractual liability. Yet *Chrysostomides* adopts a rather conservative approach to the issue: instead of seeing the Euro Group as an EU institution, it understands it as a mere bridge between the supranational and the national level – 'an instrument of intergovernmental coordination'[21] which does not therefore risk intruding in the competences of the Council and in the independence of the ECB. To do so, the court emphasises that Protocol 14 requires the Euro Group to meet *informally* – although critics may doubt whether meeting informally is the same as not being a formal institution all the more considering that Article 2 of the Protocol then regulates the election of the President of the Euro Group. In doing so, the judgment safeguards the largely political nature of the process leading to the decisions by the Group, but at the risk of having a possibly negative impact on judicial protection at the EU level. Yet, the principle expressed in *Ledra Advertising*, which binds the Commission to the respect of fundamental rights, remains applicable and highly relevant: as explained by the AG and confirmed by the CJEU,[22] individuals who suffered a damage are not deprived of protection as they can bring their actions against the Commission or the ECB. Even in that case, however, it can be wondered whether the crucial recognition of the principle that EU institutions must act in a way that is consistent with EU law is sufficient in light of the reluctance of courts to find an actual violation of law in the context of measures intended to safeguard financial stability: as *Chrysostomides* again shows after *Ledra Advertising*, decisions might remain permeated by economic considerations which seem to play an increasingly explicit role in the interpretation of legal rights.

---

19 Yanis Varoufakis, *Adults in the Room: My Battle with Europe's Deep Establishment* (Bodley Head 2017) 232.

20 Guy Verhofstadt, the leader of the liberal group (ALDE), said that the EU approach to the Cypriot crisis 'gives the impression that Europe is failing – what's failing is the bad inter-governmental system we have today', 'MEPs angry at EU's Olli Rehn over treatment of Cyprus' (*BBC News* 17 April 2013).

21 *Chrysostomides* (n 13 above) para 88.

22 This is because 'agreements are given concrete expression and are implemented by means, in particular, of acts and action of the EU institutions. Individuals may thus bring before the EU judicature an action to establish non-contractual liability of the European Union against the Council, the Commission and the ECB in respect of the acts or conduct that those EU institutions adopt following such political agreements' (ibid para 93).

Northern Ireland
Legal Quarterly
Winter Vol. 72 No. 4 (2021) 805–810
Commentaries and Notes DOI: 10.53386/nilq.v72i4.906

Wealth and poverty law: a review of Katharina Pistor's *The Code of Capital*

Moniza Rizzini Ansari*

King's College London
Correspondence email: moniza.rizzini_ansari@kcl.ac.uk

INTRODUCTION

Katharina Pistor has long been recognised as a prominent voice in scholarly debates on law and economics. Her most recent book *The Code of Capital: How the Law Creates Wealth and Inequality*[1] is no exception, having been acclaimed in various circles including non-academic outlets. This is, indeed, a commendable interdisciplinary contribution to inquiries into the seemingly unprompted inner workings of global capital. Set out to reach a broader, non-legal readership, I contend in this review that the book is a timely source for legal scholars and practitioners to reconsider the socioeconomic implications of their crafts, ie the creation of wealth and the stability of its unequal distribution in society.

OVERVIEW

The book opens by unravelling the basic legal infrastructures of the financial system in terms of contracts, property, collateral, trust, corporate and bankruptcy law. Behind the complexity of global financial markets and their intangible assets transactions, there rest basic legal instruments, forms, modules, actors, institutions, procedures, safeguards, entitlements, rights and obligations. As an investigation into the legal fabrication of privileges, Pistor exposes the

* Moniza Rizzini Ansari is a research associate at King's College London, Department of Geography, and a research fellow at the Federal University of Rio de Janeiro, School of Law. She holds a PhD in Law from Birkbeck, University of London. Her research focuses on the aesthetics of poverty and violence in urban margins from the perspective of critical legal geography. Funding: CAPES Foundation (BEX 0736/14-7) and FAPERJ (E-26/204.583/2021).

1 Katharina Pistor, *The Code of Capital: How the Law Creates Wealth and Inequality* (Princeton University Press 2020).

making of capital itself as the effects of legal coding. For this frame of analysis, I take this book as a remarkable invitation to re-examine legal participation in the creation of both wealth and poverty, or as this review's title suggests, the intricacies of what could be framed as the changing forms of wealth and poverty law.

Chapter 1 outlines Pistor's view of capital as legally coded assets by which wealth is generated in the world to the benefit of the assets' holders and to the disadvantage of the have-nots. This is how law – in fact lawyers – creates wealth as well as inequality. Pistor's approach suggests a subtle alignment with the currently prominent perspectives on legal materiality, following the traces of core legal modules that historically shape financial markets whilst such ingenious formations are 'blackboxed', or efficiently invisible.[2] A core ingenuity to be underscored by this approach is how *private* codifications in law are secured by the *public* structures of coercive enforcements. Made into an 'invisible hand', the code of capital secures an entire market economy premised on private enterprise and enrichment. Capitalism, as a system of private law imbricated in the public order, has risen and expanded globally by means of an increasingly globalised legal coding endorsed by states.

Chapters 2 to 5 provide the material basis of the book, retracing a legal history of capital's transmutations from the perspective of four assets (land, firms, debt and know-how) which are made into capital by asset-creating legal modules such as contracts, property rights, collateral, trust, corporate and bankruptcy law. These modules, Pistor argues, graft legal attributes onto material or fictional assets, conferring priorities between competing claims, durability in time, convertibility of values, and universality in the global landscape. As a result, land-based property, corporations, financial assets and intellectual property rights emerge as repositories of wealth (and bedrocks of poverty). It is by this stable mechanism of legal-coding devices and techniques that any asset is turned into capital, ie the means of wealth creation, accumulation and concentration. In this light, the changing emphases of capitalism, such as the current turn towards financialisation, are construed as mere implementation of longstanding legal techniques

2 The works of Annelise Riles and Mary Poovey could be highlighted as particularly relevant for readers looking for further references on such approaches to law and finance. Riles develops an ethnography of legal experts in the financial markets from the perspective of the collaterals as documents rather than norms. Poovey addresses the global financial crisis as resulting from neoliberal financial models which are operationalised by professionals and thus actualised in the world: Annelise Riles, 'Collateral expertise: legal knowledge in the global financial markets' (2010) 51(6) Current Anthropology 795; Mary Poovey, 'On "the limits to financialization"' (2015) 5(2) Dialogues in Human Geography 220.

to new assets – this time intangible, fictional and, themselves, legally made assets.

However, having traced the legal building blocks of capital as such, an elementary question could be raised: if there is no unified global legal system, how can global capitalism be presented as legally coded? Pistor addresses this question in chapter 6 by revealing a global legal infrastructure that is portable and dominated, in practice, by the domestic legal systems of England and New York State which are, in fact, remarkedly recognised and enforced all over the world in the service of capital. This ubiquity is undeniably imperialist and it mirrors a long history of exporting Western legal systems to subjected jurisdictions and territories across the world. But rather than a state-led offensive, this expansion required a relatively recent regulatory transformation in the international arena of treaties and bilateral agreements in which nation states adhere to foreign dispute settlement mechanisms and private arbitration and give private autonomy to parties to decide their jurisdiction and conflict of law rules – particularly when it comes to financial assets whose intangibility evades territorial control. As a result, a wide network of micro-practices, contracts, private agents, arbitration and litigation strategies uphold the global code of capital. As Pistor puts the various pieces of this puzzle together, it becomes clear that the global legal infrastructure is a contingent effect of legal actors which directly or indirectly make an 'empire of law' and through it the creation and distribution of wealth in the world.

The craftmanship of private lawyers, whom Pistor designates the masters of the code of capital, is explored in chapter 7, the most thought-provoking chapter for a legal readership. Contrary to common construal of the holders of capital as the self-interested agents of change and their lawyers as the tools that enable their manoeuvres, Pistor centralizes transactional lawyers and law firms as the key performers of innovative coding strategies. Through lawyers, the coding of capital springs from multiple small-scale private transactions which actively create new law. As such, legal coding techniques are advanced by private lawyers, attorneys and arbitrators rather than public magistrates or legislators. In other words, capital's legal code derives less from a grand masterplan from a superior force than from the amassed practices, cases, deals and knowhow of legal experts incrementing laws and expanding legal boundaries from previous legal materials. The rise of a global legal profession is retraced both in civil law and in common law families, as a relatively recent formation growing from the nineteenth century into hybrid law-making systems that are (at least partially) immune from public scrutiny. Lobbying for legislative reforms is only a secondary strategy followed by asset holders in the broader spectrum

of coding innovations made available by the master coders who work from existing files, cases, contracts, recorded precedents and so forth.

Thus, far from a superior source of legal authority, law emerges as a coding technique similar to other forms of coding social, political and economic life. Indeed, in the contemporary rise of digital modes of ordering, chapter 8 contrasts legal and digital codes as holding competing and complementary roles in enhancing private gains. Whilst getting into the intricacies of the digital–legal crossroads – blockchain, smart contracts, cryptocurrencies, digital property title registration, and digital autonomous organisations – important implications of Pistor's framing of the law as code unfold. Most notably is that the process is decentralised in terms of control and increasingly global in scope. Moreover, 'law' can be viewed as a practical operation which is shaped by its own processes, turning out to be permanently incomplete and malleable.[3]

The book ends, with chapter 9, in an analytical recompilation of global capitalism in terms of the dynamic recursivity between capital, private law and state power, offering insight for a critical philosophy of rights. Departing from Marxist critique or other forms of 'post-political' analyses such as rational choice theories, Pistor's focus on the role of law in the making of capital and private wealth enables readers to engage with a new form of critique, one that is centred on the process by which private actors manufacture legal codes premised on individual subjective rights that are protected by states. Beyond interests, ideologies or influences, what guides the configuration of power lies in capital's rule by law, in which the contingent coding of capital in private law is raised to the foundations of public law. In view of this, Pistor's horizon of change rests in statutory control over the coding of capital, putting forward an eight-tiered programmatic agenda to limit the ample scope of unregulated choices by which lawyers operate and defer the legal mobility of global capital. It also entails an ethical restructuring of legal education and the legal career.

Somewhat ironically, then, the book starts with a compelling critique of the legal role in the production of inequality and ends with a defence of more law, more regulation and more state institutions, rights and

3 Cornelia Vismann's media-technological approach offers an important contribution to this point, by placing the historical transformations of law in the material basis of record-keeping, files, lists and inventories which form a file-based system of power: Cornelia Vismann, *Files: Law and Media Technology* (Stanford University Press 2008) 9.

enforcements.[4] Law and its practitioners are placed at the centre stage of both the problem and of the solution. Pistor's proposition is to foster at least a certain balance to a system of unequal distribution, as a pragmatic approach in the face of no viable radical alternative.

Although readers might be reluctant to concede such an extensive power within lawyers' everyday practices and thus admit a sense of inescapable structural injustice of access, Pistor's compelling argument raises fundamental questions about the potentials of legal practices to advance social transformation, opening up new frontiers of theoretical inquiry about social justice. Decoding capital to find that the source of private wealth rests in law also entails acknowledging that socioeconomic injustices are legal constructs which, at least in theory, could be legally reversed. Of course, to suggest that social change may come from lawyers' change in practice, as if persuasion could work to redress the path of an entire global legal profession, would be unsatisfactory. Not only does this proposition disconcertingly assume that lawyers are disinterested agents – ie mere experts doing their work – it also undermines the integral connection between modern legal systems to capitalism.

Whilst raising limits to legal manoeuvres in coding capital certainly offers an important practical agenda towards fairer distributions of wealth in society, I would like to stress, instead, a stronger potential in the book's argument to be further explored as a new direction for research on the relationship between economics and law. It regards Pistor's crucial redefinition of wealth in legal terms which, I argue, also enables a timely reconceptualisation of poverty. In other words, it is through law that both wealth and poverty are made in the world. To be disenfranchised and dispossessed, rather than reflecting a basic material deprivation which economists attempt to remedy, becomes a matter of lack of access to legal codes and its masters. Although Pistor's focus on wealth creation conveys a comprehension of poverty as inequality – that is, as a negative by-product of wealth creation and distribution – the book can be seen to enable a novel understanding of poverty as a legal construction beyond a simple and essential material maldistribution of resources. What poverty lacks, indeed, is access and, as a result, poverty can be seen as first and foremost a legal injustice. In other words, rather then a negative effect, poverty is a positive wrong forged by law. It is in this stable legal role that we can combine spatial and temporal transfigurations of wealth and poverty

4 A point made in line with Sundhya Pahuja's analysis of a sort of a recurrent deadlock in legal critique which works to continually reinforce law's own expansion, 'Global poverty and the politics of good intentions' in Ruth Buchanan and Peer Zumbansen (eds), *Law in Transition: Human Rights, Development and Transitional Justice* (Hart 2014).

law in the hands of legal practitioners, often oblivious to the effects of their craft on the lives of others. It is also in the legal realm, rather than in economic redistributive policies, that the problem of poverty and inequality needs to be urgently tackled.

Northern Ireland
Legal Quarterly
Winter Vol. 72 No. 4 (2021) 811–817
Commentaries and Notes DOI: 10.53386/nilq.v72i4.907

Case review: the Rio Doce mining disaster in Brazil – *Samarco vs Environment Council of Minas Gerais*

Flávia do Amaral Vieira

Federal University of Santa Catarina, Brazil
Correspondence email: ei_flavia@hotmail.com

INTRODUCTION

In 2015, two iron ore tailing dams operated by Samarco Mineração SA, a joint venture of Brazilian transnational mining company Vale SA and the Anglo-Australian BHP Billiton (now BHP), collapsed in Brazil. The dam rupture poured roughly 40 million cubic metres of mining waste into communities, the Rio Doce valley, and the Atlantic Ocean, across 650 km. It is considered to be an industrial disaster that has caused the greatest environmental impact in Brazilian history and the largest in the world involving tailing dams. This led to multiple lawsuits being filed in Brazil, Australia and the United Kingdom, including allegations for negligence and a claim for damages by the victims of the dam rupture and their families.[1]

In this paper, I aim to analyse the decision of the Environment Council of Minas Gerais, Brazil, which authorised the return of Samarco SA's operations four years after the disaster. In the period between the crime and the authorisation to return to activity, the lack of remedial measures is noteworthy, as several civil and labour lawsuits are still ongoing, and there is yet much controversy and conflict between the company and the victims. The decision demonstrates how, in times of economic crisis, the legal system responds in favour of corporate interests, rather than the people whose human rights have been violated.

I start by providing a summary of the facts, contextualising the elements of the disaster and later focus on the environmental licensing process of the case in review. Finally, my conclusion highlights the limits of the existing legal framework under the neoliberal discourse, particularly in the extractive sector.

1 Business and Human Rights Resource Centre, 'BHP & Vale lawsuit (re dam collapse in Brazil)' (2018).

OPENING REMARKS: CONTEXTUALISING MINING AND ENVIRONMENTAL REGULATION IN BRAZIL

In Brazil, due to historical factors, mining is symbolically linked to development and to expectations of employment and well-being. But, since colonisation, the exploitation of mining is marked by processes of deterritorialisation, geopolitical dependence and power asymmetry.

The Federal Constitution of 1988 represents an important milestone in the consolidation of diffuse rights and forms of judicial control to promote these rights. The environment was one of the first issue areas to be affected by this regulation, with the creation of mechanisms for social participation. Despite that, its implementation remained insufficient, and corruption, lack of financial resources, constant restructuring of environmental agencies and low levels of environmental consciousness are well recognised as factors inhibiting environmental capacity in Brazil.[2] Currently, the growth of investments in primary mineral extraction for export in the country has resulted in the increase of social and environmental conflict, and the tendency for this scenario is to expand further in the context of the ongoing flexibilisation of environmental licensing regulations at all levels.

For example, there is a New Mining Code proposed by the Ministry of Mines and Energy and Decree 47.137/2017, in which the Governor of the State of Minas Gerais, to streamline the licensing processes, facilitates environmental norms so that companies may request, simultaneously, two or three required licences. In this sense, it is a fact that state government policy in recent years has been responsible for the scrapping of governmental agencies, thereby making it unlikely that these agencies can effectively carry out functions prescribed in new legislation.[3] In effect, the rupture of the Fundão tailings dam was a frightening example of this critical context but is far from being an isolated case.[4]

---

2 Kathryn Hochstetler, 'Brazil' in: Helmut Weidner and Martin Jänicke (eds), *Capacity Building in National Environmental Policy: A Comparative Study of 17 Countries* 1st edn (Springer 2002).

3 Andréa Zhouri at al, 'The Rio Doce mining disaster in Brazil: between policies of reparation and the politics of affectations' (2017) 14(2) Vibrant: Virtual Brazilian Anthropology.

4 Haruf Salmen Espindola, Eunice Sueli Nodari and Mauro Augusto dos Santos, 'Rio Doce: risks and uncertainties of the Mariana disaster (MG)' (2019) 39(81) Revista Brasileira de História.

THE DAM RUPTURE OF SAMARCO IN THE RIO DOCE BASIN

Samarco Mineração SA is a privately held company, founded in 1973. The company's operations range from mineral extraction, through secondary processing, to the transoceanic transport of pellet feed and, mainly, iron ore pellets, directed to markets in Africa and the Middle East (23.1 per cent), Asia – except China – (22.4 per cent), Europe (21 per cent), Americas (17 per cent) and China (16.5 per cent).[5] Samarco is organised as a corporate joint venture – an association between two independent companies with a legal personality. Since 2000, it has been divided equally between Vale (50 per cent) and BHP Billiton Brasil Ltda (50 per cent), the Brazilian subsidiary of the Anglo-Australian group. However, the specific organisational format assumed by Samarco is that of a non-operated joint venture, so that operational responsibility falls to Vale.

On 5 November 2015, 35 kilometres from the municipality of Mariana, in the state of Minas Gerais, two mining tailing dams operated by Samarco collapsed, releasing toxic iron-ore residue into communities, affecting an extensive area of the states of Minas Gerais and Espiríto Santo.[6] The residue destroyed the nearby district of Bento Rodrigues killing 19 people immediately and polluting the water supply of hundreds of thousands of residents. The arrival of the toxic mud in Rio Doce and its tributaries, whose watershed covers 230 municipalities, and then the ocean, destroyed hundreds of dwellings, caused major losses to the productive activities of hundreds of riverine communities, disrupted the supply of water for the population, and caused wide-ranging damage to human and non-human lives in the area.[7]

After many criticisms, on 2 March 2016, Samarco reached a settlement to restore the severely damaged environment and indemnify the affected communities. However, the Brazilian Federal Prosecutor Office insisted that the deal did not guarantee proper clean-up and damages because the affected populations were not included in settlement talks. In the same year, Brazilian federal prosecutors also filed homicide charges against 21 people, including top executives

5 Rodrigo Salles Pereira dos Santos and Bruno Milanez, 'The construction of the disaster and the "privatization" of mining regulation: reflections on the tragedy of the Rio Doce Basin, Brazil' (2017) 14(2) Vibrant: Virtual Brazilian Anthropology 127.

6 Kirstin Ridley, 'BHP faces first step in $6.3 billion UK claim over Brazil dam failure' (Reuters, 14 July 2020).

7 Cristiana Losekann, Thais Henrique Dias and Ana Valéria Magalhães Camargo, 'The Rio Doce mining disaster: legal framing in the Brazilian justice system' (2020) 7(1) The Extractive Industries and Society 199.

of BHP, Vale and Samarco, for the 19 deaths resulting from the dam rupture, but the federal court suspended the criminal case.

Only in October 2018 did Brazilian prosecutors announce that they had reached a final compensation deal with Samarco, Vale and BHP, which included compensation payments for the relatives of the 19 people killed in the disaster and for those who lost their properties. The amount has not been disclosed.

However, many claimants are still seeking compensation for physical and psychological injury, property damage, moving costs, loss of earnings, loss of water supply and lost fishing income. The victims allege that the reparation for the disaster was not guaranteed because Renova Foundation, a redress scheme established in 2016 by the three mining companies to manage the disaster recovery, lacks independence and its compensation scheme is slow, bureaucratic, inadequate and has not properly involved victims in decision-making.

THE CASE OF SAMARCO VS ENVIRONMENT COUNCIL OF MINAS GERAIS

The Fundão dam was part of the infrastructure necessary for making Samarco's mining complex operational. Soon after the disaster, the company had its operating licences suspended by the authorities, when the state government determined new conditions for returning: a new plan for disposal of the tailing. In the specific case of Minas Gerais, the body responsible for environmental policy is the Minas Gerais State Environmental Policy Council (COPAM), whose purpose is to deliberate on guidelines, policies, regulatory and technical norms, standards and other measures of an operational nature, being responsible for environmental licensing.

The option, then designed by Samarco, was to use a pit, a huge hole where the company extracted iron ore, located in its production complex in the mining town of Mariana. In 2017 Samarco obtained an environmental licence from the state of Minas Gerais to carry out the works to adapt this pit. In parallel, Samarco also submitted to the environmental authorities a licensing request for corrective operations for the entire project.

In Brazil, in a tight summary, environmental licensing takes place by granting three types of licences, which are: Preliminary Licence, Installation Licence and Operation Licence.[8] These can be issued separately or successively. The Preliminary Licence is the first stage of environmental licensing, a stage in which the environmental feasibility of the project is attested and its conception approved. It is at this stage

8 Lei No 21.972/2016, Provisions for the State System of Environment and Water Resources, arts 16, 17, 18.

that there are public consultations, through hearings. The second phase is the Installation Licence, which authorises the installation of the enterprise in accordance with the specifications contained in the approved plans, programmes and projects, including the conditions. The Operation Licence is the last phase, which authorises the project operation and the performance of the impacting activity. This happens after verifying the effective fulfilment of what is stated in the Preliminary and Installation Licences.

In addition, article 225 of the Federal Constitution guarantees the right to a healthy and balanced environment, as well as requiring, for the installation of a project or activity that potentially causes significant degradation of the environment, a previous study of environmental impact. It is also foreseen in the Federal Constitution that anyone who exploits mineral resources is obliged to recover the degraded environment, according to the technical solution required by the competent public body (article 225, paragraph 2) and that the conduct and activities considered harmful to the environment will subject offenders, individuals, or legal entities to criminal and administrative sanctions, regardless of the obligation to repair the damage caused (article 225, paragraph 3).[9]

New requests for licences and a return to the company's operations were underway while investigations into the causes of the disaster were ongoing. These indicated that the managers of the mining company were aware of the risks that the dam was taking and did not take adequate safety measures, with indications that the licensing of the dam was done in a hurry, without the company fulfilling fundamental requirements for obtaining the licences. In doing so, the mining disaster that hit the Rio Doce valley had great repercussions on the justice system.

Samarco submitted the licence request in September 2017 to COPAM.[10] The corrective licence operation evaluated, in a single process, the 36 licences suspended in 2016 after the tragedy, and the 14 licences that were being processed at the same time of the breach. On 25 October 2019, despite the progress of the various processes for determining liability for the disaster and questions about the effectiveness of the remedial measures, COPAM authorised Samarco to resume operations in Minas Gerais. The licence is valid for 10 years, and the company resumed operations at the end of 2020

COPAM's decision was made through a vote. As a Council, it is a mechanism created by environmental regulation to guarantee social participation within the licensing process. The main point to be questioned is the composition of the Chamber, formed by 12

9 *Constituição da República Federativa do Brasil de 1988*.

10 'Parecer n. 0603993/2019' – COPAM.

councillors. Of these, four are representatives of the state government; three are from the federal government and three from the business/mineral sector, with converging interests for the return of Samarco. The two remaining vacancies are filled by representatives from the Regional Council of Engineering and Agronomy (Crea-MG) and a non-governmental organisation, the National Civil Society Forum on Watershed Management (Fórum Nacional da Sociedade Civil nos Comitês de Bacias Hidrográficas – Fonasc-CBH, in Portuguese). Mayors from affected cities also pressured for the return of the company's operations. With such an unbalanced representation, it was not surprising that the voting score on the resumption of the company was 10 votes in favour, one abstention and one vote against, from Fonasc.

This decision put in question the transparency and efficiency of the licensing system of large enterprises in Brazil. Previously, Samarco had already failed to comply with environmental standards. Between 1996 and 2015, Samarco accumulated about 18 assessments for environmental reasons. However, the company was able to take advantage of the slowness of the legal and public administration systems and the lack of punishment, not changing its corporate practices. This fact highlights the disparity of forces and influences on the dispute: on the one hand, we have two of the three largest mining companies in the world with techniques, strategies and specialised knowledge; on the other, the affected population, urban and rural communities, traditional peoples, quilombolas, indigenous peoples, communities that live on fishing, among others. COPAM's authorisation may be related to insufficient control of environmental agencies, in what could be described as an appropriation of environmental agencies by an elite associated with the government and the business sector.[11]

The United Nations Guiding Principles on Business and Human Rights of due diligence establish, on the duty to respect, that corporations must refrain from violating human rights and deal with the negative consequences of the activities in which they have some involvement, to ensure that their activities and relationships do not violate human rights. When we analyse the case of the Samarco disaster and the lack of significant responses regarding human rights violations, the issue of corporate capture of the government institutions cannot be ignored.

It should be noted that, given the severity of the disaster that occurred four years earlier, it would be expected that the licensing of resumption of operations would be much more rigorous, respecting the three-phase process again and allowing a broader discussion on

11 Bruno Milanez and Clarissa Reis Oliveira, 'Capacidade ambiental no nível subnacional: o caso do estado de Minas Gerais, Brasil' (2015) 44 Planejamento e Políticas Públicas 317.

the costs and benefits and the security requirements. However, the procedure labelled 'corrective' was dedicated solely to the re-evaluation of the final licence – the operational one. In theory, environmental licensing should guarantee public participation, transparency, and social control. But, as mentioned, not even the victims of the disaster have a seat in the Mining Chamber.

FINAL CONSIDERATIONS

The case of the Rio Doce Disaster illustrates negligence of business agents and public authorities. The collapse fuelled strong questions about the mining industry's ability to maintain sufficiently secure structures. Nine months before Samarco's licence was granted, another disaster affected the state of Minas Gerais, the mining industry, and Brazilian socio-environmental conditions – the Brumadinho disaster, in Paraoapeba river, in which over 200 people died in another dam rupture owned by Vale SA.[12] These two great mining related tragedies marked the 2010s in Brazil.

To date, there has been no condemnation in court of any of Samarco or Vale's employees or executives. The Rio Doce disaster illustrates that state agencies responsible for public regulation have had very limited influence over corporate practices and technical options by mining companies in Brazil. These tragic events exemplify the pattern of human rights violations committed by corporations and the challenge to hold these companies accountable.

12 Katy Watson, 'Vale ended our lives': broken Brumadinho a year after dam collapse' *BBC News* (25 January 2020).

Introduction

Articles

Commentaries and Notes