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Labour Law and Time

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Abstract

The chapter explores scholarship on labour law and time. It begins by considering some of the characteristics of this broad and diverse body of research – identifying the myriad ways that it manifests as method and theory. What becomes clear is that much of the scholarship is interdisciplinary and critical in nature. The chapter proceeds to consider key thematic areas of labour law research relating to time. This seeks to highlight some of the recent topics of interest to labour law scholars and, most particularly, the diversity of methodological approaches taken to tackle temporal themes. Finally, the last part of this chapter considers a potential new direction for scholarship on labour law and time. This relates to the emerging temporality of the innovation economy, and technology startups in particular.

Key words

Time, temporality, interdisciplinary

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<a> INTRODUCTION

Labour law is replete with temporality.¹ Work time,² and an employer's control over it, underpins the very basis of the employment relationship. Employers' right to instruct employees facilitates employer adaptation to changing conditions over time. Employees, for their part, have various legal rights and protections with respect to time, including limits on maximum hours of work time and various provisions that aim to facilitate employee management of the intersection between work time and time for family and other aspects of personal life. Some employee rights are subject to further time restrictions in the form of qualifying periods. And, of course, legal processes take time. Pursuing an employment claim in a court or tribunal will come with its own particular temporality. Beyond labour law's categories, rules and processes, the very discipline itself has as its point of application the employment relationship and, more broadly, the productive sphere. Particular work contexts come with their own temporal rhythms and demands, and these change over time. Moreover, labour law mediates between the productive sphere and that of social reproduction. Again, another site with its own, indeed multiple, temporal rhythms and demands, that can also change over time.

Labour law, then, both explicitly and implicitly considers time, and its operation is shaped by and, in turn, shapes, domains of life – production and social reproduction – that are structurally separated in large part by time. As a result, labour law scholarship engages with issues of time in multiple ways. Time can be a subject matter, framed as a driver or effect of change, a lens through which to understand law, or problematized in its own right.

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¹ Time is integrally related to and often indistinguishable from space, although for the purposes of this chapter I refer solely to time. See Norbert Elias, *Time: An Essay* (Blackwell 1992), 99–100, '... every change in "space" is a change in "time"; every change in "time" a change in "space"'.

² References to 'work time' and 'working time' refer to the conceptualization of work in the contract of employment. However, I recognize that many forms of work fall outside of this, not least the work of social reproduction.

In this chapter, I will explore scholarship on labour law and time. I begin by considering some of the characteristics of this broad and diverse body of research – identifying the myriad ways that it manifests as method and theory. What becomes clear is that much of the scholarship is interdisciplinary, drawing particularly on social scientific insights, and critical in nature. I then explore the scholarship on labour law and time from a different perspective, by highlighting key thematic areas. Many of the core features of the contract of employment have a temporal element and these are subject to constant tension between employers and employees. This tension is related, at least in part, to the constant flux of capitalism, changing technologies and changing social attitudes. My review is a selective account of the available scholarship.³ The focus is limited primarily to employees, except in cases where I draw on literature that specifically explores issues relating to workers or independent contractors. It is also biased towards the jurisdiction of which I have most knowledge, that is, the United Kingdom (UK). However, the aim here is to highlight some of the more recent topics of interest to labour law scholars and, most particularly, the diversity of methodological approaches taken to tackle temporal themes. Finally, in the last part of this chapter, I draw on research that I have been undertaking on the contemporary innovation economy, and technology startups in particular, as one example of the future direction of labour law scholarship on time.

<a> AN INTERDISCIPLINARY AND CRITICAL ENQUIRY

³ There are few, if any, reviews or compilations of literature specifically addressing labour law and time, although time is implicitly central to many, such as Joanne Conaghan and Kerry Rittich (eds), *Labour Law, Work, and Family* (Oxford University Press 2005). However, on law and time more generally, see, eg, Siân M Beynon-Jones and Emily Grabham (eds), *Law and Time* (Routledge 2017); Sofia Ranchordás and Yaniv Roznai (eds), *Time, Law and Change: An Interdisciplinary Study* (Routledge 2020).

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The study of labour law and time can span a variety of legal methods from doctrinal scholarship to socio-legal approaches. However, it almost always has an element of interdisciplinarity to it – drawing especially from sociological insights and approaches – and it almost always has a critical edge. Even much of the doctrinal analysis of temporal issues, such as that on working time, includes an assessment of that doctrine utilising criteria beyond law itself and which comes from an understanding of social life. In this section, I explore three (interlinked and overlapping) ways in which social science can contribute to labour law scholarship on time – by the application of empirical data of social life, through the application of social theory, and the application of social science theory and method to legal methods – and consider what labour lawyers may do with such social scientific insight.

* Empirical Data of Social Life*

Interdisciplinarity can occur in a basic form by labour law scholars making linkages with empirical investigation of how time is used, most particularly in work life, but also in family life. This labour law scholarship is embedded in its historical and/or contemporary context and the temporality of production in that context. So, for example, it may draw upon sociological literature that charts the shift from Fordist production models of the industrial period with its associated use of time influenced by Taylorism to the post-Fordist era shaped by globalization, neo-liberalism and continued technological innovation.⁴ Alongside economic change is also change in social attitudes towards and practice in the social reproductive sphere of family, care and leisure.⁵ The two areas of

⁴ Frederick Winslow Taylor, *The Principles of Scientific Management* (Norton 1947); Judy Wajcman, *Pressed for Time: The Acceleration of Life in Digital Capitalism* (University of Chicago Press 2015); Melissa Gregg, 'The Athleticism of Accomplishment: Speed in the Workplace' in Judy Wajcman and Nigel Dodd (eds), *The Sociology of Speed: Digital, Organizational, and Social Temporalities* (Oxford University Press 2017).

⁵ Rosemary Compton, *Employment and the Family: The Reconfiguration of Work and Family Life in Contemporary Societies* (Cambridge University Press 2006); Helen Norman, Colette Fagan and Mark Elliott, 'How Can Policy Support Fathers to be More Involved in Childcare? Evidence from Cross-country Policy Comparisons and UK Longitudinal Household Data' (Women and Equalities Committee 22 March 2017).

social life are of course interlinked and the massive increase of women in the paid labour market since the 1960s is an example of this.

What do labour law scholars do with such information? Empirical data contextualizes an analysis of law and enables insights into the linkages, disconnects, or otherwise mutually constitutive interconnection, between what labour law 'sees' and how it categorizes social life, and the empirical reality. For example, it can be used as evidence to question and challenge the way that law categorizes some tasks as work and others as falling outside of this, thus affecting when and to whom legal rights and protections may apply. Moreover, a picture can emerge regarding the relevance of certain legal rights or protections and what employee concerns may fall outside of these. Socio-legal insight into the nature of the interaction between law and wider social life are crucial here. A critical element emerges in the way that scholars can locate the role of law in broader social change and interrogate its role against key labour law goals, such as operating as a countervailing force against the power of capital. For example, the facilitation by law of part-time and casual work, which – while claiming to meet both employer and worker needs for flexibility – can give rise to worker precarity and vulnerability, particularly for women workers.⁶

* Using Social Theory*

Beyond drawing on empirical data, labour law scholarship on time can be interdisciplinary by utilising theoretical insights into the nature of time that have emerged from sociological enquiry. An important example of such social theory is the recognition that time is socially constructed.⁷ The way in which we understand time is not objective, natural, or inevitable. Rather it is culturally produced

⁶ Sandra Fredman, 'Women at Work: The Broken Promise of Flexicurity' (2004) 33 *Industrial Law Journal* 4; Judy Fudge and Rosemary Owens (eds), *Precarious Work, Women, and the New Economy: The Challenge to Legal Norms* (Hart 2006).

⁷ Kerry J Daly, *Families & Time: Keeping Pace in a Harried Culture* (Sage 1996).

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via social understanding and material practices.⁸ Often we unquestioningly associate time with linear clock time – the modernist perspective that came to dominance in industrial capitalism. However, this is not the only way to understand time. Time can be understood as circular,⁹ oriented towards the past,¹⁰ or natural in the sense of associated with living things,¹¹ to name a few perspectives. Time is both experienced subjectively and collectively – we interpret our own particular feeling of time, but this is shaped by cues that are located in the context and particular social groupings in which we operate.¹²

Another important example of sociological insight into the nature of time is that it is not neutral.¹³

Certain times may be associated with a particular social significance. A large body of feminist scholarship has recognized a gendering of certain times and associated value (or lack thereof) given to time associated with feminized tasks or roles in contrast with those associated with the masculine, as well as other or further distinctions made on the basis of class, race and ethnicity.¹⁴

Time can powerfully shape how we act and feel we should act. In essence, time is linked with power and can operate as a mode of social ordering and social control.

These insights offer much potential for labour law scholarship. They can augment existing legal methodological approaches that focus on the instrumental or constitutive nature of law. Features of

⁸ EP Thompson, 'Time, Work-Discipline, and Industrial Capitalism' (1967) 38 *Past and Present* 56; Barbara Adam, 'Within and Beyond the Time Economy of Employment Relations: Conceptual Issues Pertinent to Research on Time and Work' (1993) 32 *Social Science Information* 163; N Elias, *Time: An Essay* (Blackwell 1992).

⁹ Daly (n 7); Julia Kristeva, Alice Jardine and Harry Blake, 'Women's Time' (1981) 7 *Signs* 13.

¹⁰ See, eg, Leanne Betasamosake Simpson, *As We Have Always Done: Indigenous Freedom Through Radical Resistance* (University of Minnesota Press 2017).

¹¹ EP Thompson (n 8).

¹² Werner Bergmann, 'The Problem of Time in Sociology' (1992) 1 *Time & Society* 81; Eviatar Zerubavel, *Patterns of Time in Hospital life* (University of Chicago Press 1979); Daly (n 7).

¹³ Daly (n 7); Zerubavel (n 12); John Leon Telles, 'Time, Rank, and Social Control' (1980) 50 *Sociological Inquiry* 171; Edward T Hall, *The Silent Language* (2nd edn, Anchor Books 1981); Adam (n 8).

¹⁴ Arlie Russell Hochschild, *The Managed Heart: Commercialization of Human Feeling* (University of California Press 2012); Tithi Bhattacharya (ed), *Social Reproduction Theory: Remapping Class, Recentring Oppression* (Pluto Press 2017).

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law that explicitly or implicitly involve a temporal element can be understood as having the potential to allocate a particular social significance to that time or assert power through time. Critical questions such as which (or whose) time does law value, how does law gender time, and how does law allocate power via time, flow from this. Knowledge that time is socially constructed raises questions about the nature of time assumed in various legal provisions and the workability of these within employing organizations and for employees who seek to manage the interface between their work and non-work lives.

Applying Social Science Methods and Theoretical Approaches to Legal Methods

A further dimension of the interdisciplinary nature of labour law research on time is the use of social scientific methods and social scientific theoretical approaches to inform legal method and analysis. Labour law scholars may conduct original research involving questionnaires, interviews and observation. These may build upon positivist approaches seeking to measure behaviour that in some way is connected to time, or social constructivist perspectives that seek to capture subjective meanings and understandings of time. Recent developments that focus particularly on the material dimension of social life, such as those building on insights from science and technology studies, broadly understood, offer new understandings of how to capture the multiplicity of forms of time, including how it is produced by human and non-human actors.¹⁵ Other approaches abound, such as that of rhythm analysis, the potential application of which to law has been given recent consideration.¹⁶

¹⁵ See, eg, the collection: Judy Wajcman and Nigel Dodd (eds), *The Sociology of Speed: Digital, Organizational, and Social Temporalities* (Oxford University Press 2017); Emily Grabham, *Brewing Legal Times: Things, Form, and the Enactment of Law* (University of Toronto Press 2016) ('*Brewing Legal Times*'); see the introduction and the section 'Politics of Labour Time' in Siân M Beynon-Jones and Emily Grabham (eds), *Law and Time* (Routledge 2019).

¹⁶ Conor Heaney, *Rhythm: New Trajectories in Law* (Routledge 2023).

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Directly undertaking empirical research enables labour law scholars to critically address questions and issues raised by law in relation to time for which no empirical data exists. Moreover, keeping abreast of theoretical approaches to social science methods, such as those in science and technology studies, opens up new possibilities for interrogating labour law and time, notably how law itself 'makes' or 'creates' time. This moves the focus beyond law's explicit or implicit references to time to consider the very form of law itself, such as how the form of the contract of employment can operate as a technology of time, that is, can bring about certain temporal effects,¹⁷ or the way in which a legal technicality can have a temporal effect that embodies politics.¹⁸ This approach continues to hold much possibility for new insight.

<a> THEMES IN LABOUR LAW SCHOLARSHIP ON TIME

 Time as Central to the Contract of Employment

The contract of employment – its subject matter, categories and rules – implicitly and explicitly engages with time. Recognizing this is a useful starting point for thinking about the scholarship on labour law and time. Much of this body of work draws attention to the myriad of temporal tensions that are present in relation to this contractual arrangement.

Employers have a great deal of power to determine temporal elements of work. In theory, the contract of employment, which typically specifies the total number of hours to be worked in any

¹⁷ Lydia Hayes, 'Work-Time Technology and Unpaid Labour in Paid Care Work: A Socio-legal Analysis of Employment Contracts and Electronic Monitoring' in Siân M Beynon-Jones and Emily Grabham (eds), *Law and Time* (Routledge 2019).

¹⁸ Annelise Riles, 'New Agenda for the Cultural Study of Law: Taking on the Technicalities' (2005) 53 *Buffalo Law Review* 973; Annelise Riles, *Collateral Knowledge: Legal Reasoning in the Global Financial Markets* (University of Chicago Press 2011).

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given period, the timing of those hours and the total duration of the contract itself, is something that is negotiated between employers and employees. In practice such negotiation is unlikely to happen as employers tend to set the terms. The employer's right to instruct employees includes organising how work is undertaken, its pace and the monitoring of that work, of which time can be a key measure. The way in which work itself is understood is intricately connected to time. In essence, an employer is paying for the temporary disposal of an employee's labour power.¹⁹ The employee must be available and willing to obey the employer's instruction during periods of work time – sometimes referred to as subordinated time. The contract of employment, then, “provides a structure through which employers can achieve productive efficiency by controlling the lever of working time.”²⁰

Employees, for their part, derive certain rights and protections from the contract of employment – but time plays an important role in determining the availability of a subset of these due to requirements of temporal based qualifying periods before they become available. In the UK context, this involves meeting the test of continuity of employment, which has dimensions of length and regularity of employment.²¹ The right to make a claim for unfair dismissal is an example of a provision with such a qualifying period. It requires a minimum of two years continuous employment before such a claim can be made.²²

More broadly, regulation of the contract of employment and work in general focuses primarily on productive work time. It is this time for which employers must pay and comply with various protections and minimum standards. Certain allowances are made for activities that take place in an

¹⁹ Karl Marx and Friedrich Engels, *Selected Works II* (Progress 1969); Claire Mummé, 'Property in Labour and the Limits of Contract' in Ugo Mattei and J Haskell (eds) *Research Handbook on Political Economy and Law* (Edward Elgar 2015); ACL Davies, 'Getting More than You Bargained For? Rethinking the Meaning of "Work" in Employment Law' (2017) 46 *Industrial Law Journal* 477.

²⁰ Hugh Collins, 'The Right to Flexibility' in Joanne Conaghan and Kerry Rittich (eds), *Labour Law, Work, and Family* (Oxford University Press 2005) 103.

²¹ Employment Rights Act 1996, ss 210–219.

²² Employment Rights Act 1996, s 108(1).

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employee's non-work time. However, generally, the contract of employment creates a binary between productive work time and non-work time, which is variously referred to as social reproduction, or family, personal, free or leisure (often framed as consumption) time.

* Working Time: Maximum, Minimum and Timing*

The overall duration of work and the timing of the hours of work is subject to much labour law scholarship. Often this takes the form of analysis of the effectiveness or otherwise of regulation that seeks to limit or otherwise control working. These enquiries tend to draw on empirical data of time use, hours worked, the effects of long hours working, or the process of enforcing any limits on working hours.²³ Some labour law scholarship has undertaken original empirical investigation of legal issues relating to working time. An example is the study by Barnard, Deakin and Hobbs.²⁴ This examined employer use of the UK opt-out of the maximum 48-hour working week provision in the Working Time Regulations 1999. Interviews were conducted with representatives of employers in five sectors, as well as trade union officials, representatives from employer organizations, HR managers and public officials with roles relating to working time. The data gathered captured some of the rationale behind employer decisions to use the opt-out and the practicalities of their gaining employee agreement with the arrangement.

In the UK, as well as some other jurisdictions, there has been an increasingly widespread use of zero hours contracts. These have been the subject to political scrutiny and potential policy change, as

²³Makoto Ishida, 'Death and Suicide from Overwork: The Japanese Workplace and Labour Law' in Joanne Conaghan, Richard Michael Fischl and Karl Klare (eds), *Labour Law in an Era of Globalization: Transformative Practices and Possibilities* (Oxford University Press 2000).

²⁴ Catherine Barnard, Simon Deakin and Richar Hobbs, 'Opting Out of the 48-Hour Week: Employer Necessity or Individual Choice? An Empirical Study of the Operation of Article 18(1)(b)' (2003) 32 *Industrial Law Journal* 223.

well as much academic consideration.²⁵ In the UK context, the Taylor Review on ‘Modern Working Practices’, of which part focused on the problem of zero hours contracts, was subject to a critical analysis by labour law scholars who drew on various empirical data and applied doctrinal analysis of proposed suggested to inform a robust critique.²⁶

The seminal study by Alain Supiot on the future of labour law in Europe,²⁷ which emphasized the increased fragmentation of time, utilized a cross-disciplinary, diachronic approach in its analysis of work and time. Diachronic refers to change over time and can be contrasted with a synchronic approach that seeks to capture a temporal element at a point in time. The research drew on empirical insights from social scientists to understand the co-constitutive nature of law and social practices as economies moved from Fordism to just-in-time production models. It observed a decline in collective time, and the associated solidarity amongst workers, and a rise in heterogeneous time use, which is individualized and requires self-regulation. Supiot called for a reworking of work time so that it takes into account a comprehensive approach to the various life needs of workers. This analysis recognizes what might be lost from a demise in the collective use of time and the potential role law might be able to play in helping workers manage the multiple individualized time in operation in order to retain a sense of family and community life.

Employer Control Over Time

The contract of employment gives rise to employer control over time in which employees are subordinate to them. This encompasses the employer ability to direct employees to undertake

²⁵ See, eg, Abi Adams-Prassl, Mark R Freedland and Jeremias Adams-Prassl, ‘The “Zero-Hours Contract”: Regulating Casual Work, or Legitimizing Precarity?’ (2015) No 11/2015 University of Oxford Legal Studies Research Paper Series; (2022) 13(3) *European Labour Law Journal* 339 —Special issue on zero hours contracts.

²⁶ Katie Bales, Alan Bogg and Tonia Novitz, ‘“Voice” and “Choice” in Modern Working Practices: Problems with the Taylor Review’ (2018) 47 *Industrial Law Journal* 46.

²⁷ Alain Supiot, *Beyond Employment: Changes in Work and the Future of Labour Law in Europe* (Oxford University Press 2001).

certain tasks and to supervise and monitor their work. A recent body of labour law scholarship has considered the rise in digital and algorithmic monitoring of employees during subordinate time.²⁸ These studies typically draw on social scientific empirical investigation into the types and extent of use of cyber-physical systems that capture data of various employee activity. This data may include GPS tracking of warehouse employees, websites opened, or keystrokes per minute. Such information is used as proxies or imprecise measures for a range of human resources decisions that may be automatically generated by AI systems, such as shift schedules, annual leave requests, the allocation of work tasks, work performance warnings and even termination. Labour law scholars typically engage in doctrinal analysis to consider how legal rules – primarily in relation to data protection and privacy – may apply or undertake analysis of cases that have gone before a court or tribunal.²⁹

A similar methodological approach has been taken to the issue of employer effort to assert their managerial prerogative over employee behaviours in their private lives, such as their social media posts.³⁰ Here, intersecting issues of employer dismissal rights and employee protections regarding dismissal, and employee rights to privacy, anti-discrimination and freedom of expression come into

²⁸ Jeremias Adams-Prassl, 'What if Your Boss was an Algorithm? Economic Incentives, Legal Challenges, and the Rise of Artificial Intelligence at Work' (2019) 41 *Comparative Labor Law & Policy Journal* 123; Antonio Aloisi and Elena Gramano, 'Artificial Intelligence is Watching You at Work: Digital Surveillance, Employee Monitoring, and Regulatory Issues in the EU Context' (2019) 41 *Comparative Labor Law & Policy Journal* 95; Valerio De Stefano, "'Negotiating the Algorithm": Automation, Artificial Intelligence, and Labor Protection' (2019) 41 *Comparative Labor Law & Policy Journal* 15; Joe Atkinson, "'Technology Managing People": An Urgent Agenda for Labour Law' (2021) 50 *Industrial Law Journal* 324.

²⁹ For discussion of the European Union's General Data Protection Regulation (GDPR), see Adams-Prassl (n 28); Aloisi and Gramano (n 28); De Stefano (n 28); Philippa Collins, 'Automated Dismissal Decisions, Data Protection and the Law of Unfair Dismissal' (*UK Labour Law Blog*, 19 October 2021) <<https://uklabourlawblog.com/2021/10/19/automated-dismissal-decisions-data-protection-and-the-law-of-unfair-dismissal-by-philippa-collins/>> accessed day month year; Philippa M Collins and Stefania Marassi, 'Is That Lawful? Data Privacy and Fitness Trackers in the Workplace' (2021) 37 *International Journal of Comparative Labour Law* 65; Gordon Anderson, Douglas Brodie and Joellen Riley, *The Common Law Employment Relationship: A Comparative Study* (Edward Elgar 2017).

³⁰ Anderson, Brodie and Riley (n 29); Virginia Mantouvalou, "'I Lost My Job over a Facebook Post – Was that Fair?" Discipline and Dismissal for Social Media Activity' (2019) 35 *International Journal of Comparative Labour Law and Industrial Relations* 101.

play. The distinction between public and private time, that is given social significance by law, has been blurred by the increasingly digitalized empirical reality.

Lydia Hayes, in her study of care workers, provides a different type of analysis in relation to employer control over time.³¹ She frames employer widespread use of zero hours contracts and telephone based electronic monitoring systems that track arrival and departure times of her study participant care workers' home care visits as *technologies of time* – that is, a technique to bring about a particular effect or relationship. Hayes argues that such technologies of time subordinate the workers' internal notions of caregiving according to nature's time and prioritize clock time. But, more than this, the clock time itself is fragmented due to the stop and start electronic monitoring of their work. In effect, the employer is using its legal rights to choose a particular temporal contractual arrangement and to monitor workers to create in care workers a specific subjective understanding and material use of time in their jobs. Implicit in this analysis is recognition that time is not objective or fixed, but rather a social construct that can be coproduced by human and non-human actors.

* 'Hidden' Times of Work*

The distinction between work time and non-work time that emerges from labour law's framing has been subject to much interrogation. In recent years, labour law scholarship has identified what appears to be slippage between the binary. There are multiple dimensions to these analyses.

Doctrinal analysis of case law has examined how courts and tribunals are categorising times of worker availability to employers as falling outside of work time. This includes time when workers are available to employers on work premises, such as time spent sleeping or undertaking incidental

³¹ Hayes (n 17).

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tasks, and other times of availability outside of the work premises, such as time spent travelling.³²

Different strands of judicial reasoning have been identified in relation to such times. For example, a literal view of work as time spent actively engaged in core work tasks versus a more nuanced approach that captures worker time at the disposal of the employer,³³ or a perspective that takes into account the type of job involved when determining certain times as work time and thus deserving of law's minimum standards and wages and other times as falling outside of this.³⁴ The latter perspective is an example of different social value given to how time is spent and the people who typically undertake tasks associated with that time use – in this case less value attributed to those undertaking feminized care labour in contrast to the more masculine security job or managerial work.

Other research has focused more on the changing nature of work organization in post-industrial economies explaining how and why this gives rise to an increased requirement of worker availability to employers without this being legally recognized, and thus paid for and protections provided, as work time.³⁵ This emerging 'time porosity'³⁶ plays out in different ways depending on where in the labour market a worker may fall and how employers achieve value from those workers.³⁷ It is observed that risks resulting from unpredictable and variable work have shifted from employers to workers and labour law doesn't offer any protection from this.³⁸

³² Lisa Rodgers, 'The Notion of Working Time' (2009) 38 *Industrial Law Journal* 80; Guylaine Vallée and Dalia Gesualdi-Fecteau, 'Setting the Temporal Boundaries of Work: An Empirical Study of the Nature and Scope of Labour Law Protections' (2016) 32 *International Journal of Comparative Labour Law and Industrial Relations* 344.

³³ Davies (n 19).

³⁴ Lydia Hayes, 'Care and Control: Are the National Minimum Wage Entitlements of Homecare Workers at Risk under the Care Act 2014?' (2015) 44 *Industrial Law Journal* 492.

³⁵ Guylaine Vallée, 'Guest Introduction' (2016) 32 *International Journal of Comparative Labour Law and Industrial Relations* 275; Emilie Genin, 'Proposal for a Theoretical Framework for the Analysis of Time Porosity' (2016) 32 *International Journal of Comparative Labour Law and Industrial Relations* 280; Emily Rose, 'The New Politics of Time' (2018) 34 *International Journal of Comparative Labour Law and Industrial Relations* 373.

³⁶ Genin (n 35).

³⁷ Rose (n 35).

³⁸ Vallée (n 35); Rose (n 35).

A different approach to interrogating what work the law ‘sees’ and what remains invisible is taken by Zoe Adams.³⁹ She provides an historical account of law’s role in capitalist work relations, focusing particularly on the role of law in constituting human labour as work. Adams demonstrates that law’s conceptualization of work by reference to rights and obligations that are deemed to have their origins in contract detracts from the underlying structural conditions that render the majority of the population dependent on accepting the particular legal form of work due to their not having the means of subsistence for survival. The structural inequality between capital and labour means that labour must prioritize the legally structured work relation over all the other forms of work they need to do in order to keep their jobs – including undertaking social reproductive labour and various other forms of work not recognized or valued by the employer.⁴⁰ In this analysis, law, via contract, abstracts away the structural inequality present in capitalist work relations and operates to legitimize the narrow framing of the work relation present in contract. Law can be understood as a mode of power to invisibilize much of the work undertaken by labour in order to engage in capitalist work relations.

* The Intersection Between Productive Work Time and Social Reproductive Time*

The particular terms upon which the binary between work time and social reproductive time interact is under constant revision – with law playing a critical role in this. Historical analysis of law and policy have been used to chart these changes,⁴¹ as have shorter temporal horizons in which specific

³⁹ Zoe Adams, ‘Invisible Labour: Legal Dimensions of Invisibilization’ (2022) 49 *Journal of Law and Society* 385.

⁴⁰ For a discussion of law’s constitutive effects vis-à-vis the invisibility of immaterial labour, see Emily Rose, ‘Reinterpreting Law’s Silence: Examining the Interconnections between Legal Doctrine and the Rise of Immaterial Labour’ (2020) 47 *Journal of Law and Society* 588; for observation of other times that are not considered work by law, see Supiot (n 27).

⁴¹ Nicole Busby and Grace James, *A History of Regulating Working Families: Strains, Stereotypes, Strategies and Solutions* (Hart 2020).

legislation is considered.⁴² Key aims of this research include interrogating the desired economic outcomes of such regulation, typically associated with changing economic conditions, identifying the ideological perspectives of families and gender roles, which include shifting priorities such as recent calls for regulation for time away from work for those experiencing menopausal symptoms,⁴³ and the practical effectiveness of law. It is noteworthy that multiple areas of law and policy shape the work and family boundary, such as discrimination law, funded childcare (of lack thereof) and social security law impacting on labour market participation.⁴⁴ This body of analysis typically puts to use a feminist lens. Fudge, for example, with reference to legislative developments in Ontario, Canada, introduces the notion of a gender contract and observes how law plays an important role in institutionalising an emerging gender contract by facilitating women's part-time and/or flexible participation in the labour market in order to fulfil social reproductive needs.⁴⁵ What emerges from this scholarship is a picture of the way that law operates to formalize gendered uses of time, institutionalize a particular social ordering of time, or give greater value to certain uses of time over others.

In some of my own research,⁴⁶ I have considered the temporal assumptions implicit in the UK's right to request flexible working provisions,⁴⁷ of which similar provisions exist elsewhere such as in Australia. My analysis reveals that the flexible working provisions view time as an objective measure;

⁴² Judy Fudge, 'A New Gender Contract? Work/life Balance and Working-Time Flexibility' in Joanne Conaghan and Kerry Rittich (eds), *Labour Law, Work, and Family* (Oxford University Press 2005); Grace James, 'Mothers and Fathers as Parents and Workers: Family-Friendly Employment Policies in an Era of Shifting Identities' (2009) 31 *Journal of Social Welfare and Family Law* 271; Ania Zbyszewska, *Gendering European Working Time Regimes: The Working Time Directive and the Case of Poland* (Cambridge University Press 2016); Grace James, 'Family-friendly Employment Laws (Re)assessed: The Potential of Care Ethics' (2016) 45 *Industrial Law Journal* 477; Gemma Mitchell, 'Shared Parental Leave: Can Transferable Maternity Leave Ever Encourage Fathers to Care?' (2023) 52 *Industrial Law Journal* 149.

⁴³ The 2022 Society for Legal Scholars conference had a mini-session focusing on menopause and the workplace with contributions by Michelle Weldon-Johns, Eugenia Caracciolo di Torella and Pascale Lorber.

⁴⁴ Busby and James (n 41).

⁴⁵ Fudge (n 42).

⁴⁶ Emily Rose, 'Workplace Temporalities: A Time-Based Critique of the Flexible Working Provisions' (2017) 46 *Industrial Law Journal* 245.

⁴⁷ Employment Rights Act 1996, part 8A.

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it assumes that individuals can fill the 24-hours in a day with a mixture of work and personal life activities and the combination of timings on each can be easily manipulated. Time is framed as neutral. In contrast, my original qualitative empirical data of software developers operating in a 24-hour global production model showed that time operates collectively and is experienced subjectively by these employees in varying ways depending on the time of the day or night, and the temporal point in the broader production cycle in which they worked. For these employees, flexible working simply did not fit with the timing of their work, nor the collective temporal practices and values in the production model to which they contributed.

In her broader project on law and time, Emily Grabham has considered various aspects of the UK's work-life balance provisions using a particular theoretical framing that actively rejects notions of linear time – as if it operates like a container for us to fill with activities – interrogating instead how time is produced by human and non-human actors and the role that law plays in this.⁴⁸ She draws on insights from science and technology studies and research making up what is referred to as the 'new materialism.'⁴⁹ This allows Grabham to conceptualize features of law as material – its technicalities, legal form, associated documents – and thus as a potential actor in the co-production of time. Her work includes a focus on the use of qualifying periods for work-life balance provisions in legislative drafting⁵⁰ and work-life balance and flexible work as regulatory ideas and legal-temporal artefacts – focusing particularly on balance's associated legal technicalities and material forms, such as right to request for flexible working requests.⁵¹

⁴⁸ Grabham, *Brewing Legal Times* (n 15); Emily Grabham, 'Time and Technique: The Legal Lives of the 26-Week Qualifying Period' (2017) 45 *Economy and Society* 379 ('Time and Technique'); Emily Grabham and Siân M Beynon-Jones, 'Introduction' in Siân M Beynon-Jones and Emily Grabham (eds), *Law and Time* (Routledge 2019).

⁴⁹ Bruno Latour, *We Have Never Been Modern* (Harvard University Press 1993); Michel Serres and Bruno Latour, *Conversations on Science, Culture, and Time* (University of Michigan Press 1995); Karen Barad, *Meeting the University Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Duke University Press 2007); Margaret Davies, *Law Unlimited: Materialism, Pluralism and Legal Theory* (Routledge 2017).

⁵⁰ Grabham, *Time and Technique* (n 48).

⁵¹ Grabham, *Brewing Legal Times* (n 15).

This overview of key themes in labour law scholarship on time should, hopefully, give a sense of its depth and diversity. It is clear that interrogating time, especially in a way that is interdisciplinary and critical, can add much to labour lawyers' understanding of their subject matter and, indeed, expand that subject matter to a fuller analysis of the range of issues that arise when considering law, labour and time. While beneficial to labour law scholarship, it should also be clear that taking an interdisciplinary and critical approach can be demanding of scholars. Such an approach requires familiarity with a wide body of literature, and thinking creatively about how social science data, theory and methodological approaches may usefully be applied to the concerns of labour law as a discipline. Moreover, adopting an interdisciplinary and critical lens is not a static position. It involves ongoing learning as understandings of work, social reproductive life and social science are constantly evolving, as are social theoretical insights and methodological approaches to research. In the final section of this chapter, below, I explore one such avenue of change that opens up further possibilities for the scholarship of labour law and time.

<a> FUTURE DIRECTIONS OF SCHOLARSHIP

As noted above, the nature of production changes over time and variations in production practices come with particular temporal rhythms that have implications for employees. An important change currently underway in many countries is the growth of the innovation economy. This brings with it an emerging conception of time that would suggest a break with modernist temporal thinking. It will be important for labour lawyers to consider the implications of this for employees' experience of work and the role of law in its regulation. In this section I outline some aspects of this emerging temporality of the innovation economy and highlight one way that it shapes employees' experience of work and interacts with labour law.

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My insights here come from an empirical research project that I conducted between August 2020 and April 2023 into digital technology startups in Scotland.⁵² The aim of the project was to identify the rules that regulate the relations between employers and employees as employers seek to extract innovation labour from employees. This project involved my interviewing 46 people who either worked in Scottish technology startups (founders or other employees) or in organizations that in some way support the Scottish technology scene (for example, university actors who help students to found startups and people who work in university or private sector startup accelerators), as well as my attending 15 sector events and training sessions targeted at those involved in, or thinking of entering, the Scottish technology startup sector.⁵³

I suggest that the temporality of the innovation economy represents something of a departure from modern linear time to incorporate features of what could be called a post-modern non-linear and complex understanding of time. While it shares with modernist thinking the assumption that those who innovate can create the future,⁵⁴ the innovation economy does not follow an incremental path towards that future. Rather, startups seek to develop new products or services for new markets by going back to first principles; identifying what problems they want to solve and completely rethinking, in light of new technological and business knowledge, how to find a solution. In Silicon Valley parlance, this mindset is referred to as 'zero to one', as contrasted with 'one to n '.⁵⁵

Moreover, there is a recognition that the past continues to inform the future. This can be seen by the implicit acknowledgement within the sector that technologies operate as part of broader

⁵² This research was supported by funding from the Leverhulme Trust (RF-2020-287\8).

⁵³ For an elaboration of my method, see Emily Rose, 'Pursing the Innovation Economy: Implications for Startup Labour' (2023) *Industrial Law Journal* (forthcoming).

⁵⁴ Department for Business, Energy & Industrial Strategy, *UK Innovation Strategy: Leading the Future by Creating It* (Crown July 2021) ('*UK Innovation Strategy*').

⁵⁵ Peter Thiel and Blake Masters, *Zero to One: Notes on Startups, or How to Build the Future* (Crown Business 2014).

systems, and their use and uptake is embedded in economic, social and political life.⁵⁶ Successful innovation involves the integration and co-evolution of elements of systems. Certain organizations in the Scottish technology sector seek to assist startup founders to understand and appropriately connect with these existing systems. For example, Fintech Scotland facilitates connections between Scottish fintech startups and the existing (traditional) banking sector. This enables these startups to better understand how their product can usefully augment present banking operations, technical systems and satisfy system requirements such as standards of privacy and risk.

Relatedly, there is an acknowledgement that attempting to create something new is high risk. Successful innovation involves a complex interplay of a myriad of technical and social elements that cannot be fully understood in advance.⁵⁷ It is highly sensitive to initial conditions, although identifying all those that are relevant is impossible. Further, the technical and social elements involved are constantly in flux and interact with each other in new ways over time. One reaction to this by sector actors, led in large part by the UK and Scottish government regulatory effort to support the sector, is to regularize aspects of the innovation process. The aim is to minimize risk, and replace complexity, uncertainty and unpredictability with a path forward. This has implications for the temporality of innovation production. For example a body of knowledge on how best to develop and commercialize innovation, developed largely by Silicon Valley gurus⁵⁸ and institutionalized by Scottish government, universities, private and third sector actors,⁵⁹ emphasizes adaptive, iterative innovation practices. External input via feedback from potential consumers takes place throughout the production process, as opposed to post-production, resulting in highly dynamic and variable

⁵⁶ John Urry, *What is the Future?* (Polity 2016).

⁵⁷ Barbara Adam and Chris Groves, *Future Matters: Action, Knowledge, Ethics* (Brill 2007); W Brian Arthur, 'Complexity Economics: A Different Framework for Economic Thought' (2013) Santa Fe Institute Working Paper 2013-04-012.

⁵⁸ For example, Kent Beck and others, 'Manifesto for Agile Software Development' <<https://agilemanifesto.org>>, accessed 19 January 2023; Eric Ries, *The Lean Startup: How Constant Innovation Creates Radically Successful Businesses* (Penguin 2011) and Bill Aulet, *Disciplined Entrepreneurship: 24 Steps to a Successful Startup* (John Wiley & Sons 2013).

⁵⁹ Rose (n 53).

production practices. The circulating expert knowledge also identifies distinct phases of the innovation lifecycle that involve moving from an initial idea and early technical development and testing through to achieving product market fit and entering a phase of high growth.

What emerges, then, is a strong future oriented temporal perspective, in which high uncertainty is moderated by various process guides or fixed points in time. How might this temporality link with scholarship on labour law and time? One response relates to employee flexibility.

An important study of work life in the innovation sector in Silicon Valley referred to it as a high-velocity labour market, which, amongst other things, is characterized by rapid job mobility, short job tenures, weak internal labour markets, and career paths that often involve starting a business or joining another startup.⁶⁰ In my own research, it was not simply numerical flexibility that was notable, but also something akin to an extreme form of functional flexibility. Employees were required to constantly shift the nature of the tasks they were undertaking and adapt to changing instruction, goals and ideas of success. These demands resulted in large part due to startup founders' efforts to fit with the regularized features of technological innovation. For example, a founder described the early phases of the startup as being:

... in rapid experimentation phase, putting some products together, seeing if they work, in essence throwing things at a wall and hoping that it sticks, seeing if there're customers there. (041, male, founder).

Another employee described that once the innovation and business development stages had reached a certain point, accepted knowledge and expectations of investors required the startup to 'scale', that is, grow dramatically in size so that it may exploit the market opportunity. This was a time for further employee adaptation:

⁶⁰ Alan Hyde, *Working in Silicon Valley: Economic and Legal Analysis of a High Velocity Labor Market* (Routledge 2003).

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I think one of the things that is very clear is that there's an inflection point in a successful startup. ... Basically, the people that you need or the skills that you need in an early-stage startup are vastly different from those you need when you move into a scale-up.

And actually, the ones that you have in the early stage can be detrimental to a scale-up.

(039, male, employee).

In sum, employees had to be nimble and adapt to these socially constructed process guides or fixed points.

I suggest that awareness of the emerging temporality in the innovation economy and fuller consideration of the implications of this for employees, of which functional flexibility is just one, offers new avenues of scholarship on labour law and time. In the case of functional flexibility, on face value, law appears to facilitate this via employer control over subordinated time. But what else might it be possible to learn? Hopefully, the discussion in this chapter of how labour lawyers can adopt a temporal lens and what this might reveal provides hints at an answer to this question.