

IT'S THE END OF WORKING TIME AS WE KNOW IT: NEW CHALLENGES TO THE CONCEPT OF WORKING TIME IN THE DIGITAL REALITY

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This article strives to unpack the concept of labour time in the digital reality. It does so by exploring the apparent gap between de jure notions of work and rest times, especially in Canada, and the way that people conduct their work time de facto given the technological advancements that enable them to work from a distance.

These recent challenges to the notion of working time have led to two main proposals of regulation. The first aims to return to the classical concept of working time and to restrict the working schedule. The other aims to celebrate the new technological capabilities to conduct work anytime and anywhere and disregards the dominant role of time in labour law. This article argues that these opposing models provide only partial solutions and both suffer from crucial deficiencies: they either ignore the dramatic changes in the world introduced by digital technology, or worse, they ignore the basic idea and purposes of labour rights.

Based on this struggle between labour law and technology, this article suggests a new paradigm for working time regulation—one which brings together the logic and structure of the new flexible online world with the basic principles of labour rights. This article thereby proposes default rules that provide basic protection to the employee and retain the idea that employees should be compensated for their actual working time and enjoy genuine rest time during the workday. This protection is enabled through the format and logic of information communication technology. At the same time, this article suggests that the default rules will also enable the parties to negotiate and agree on the financial value of additional working hours, in a way that takes into account the new possibilities of the digital age along with the purposes of labour rights.

Cet article s'efforce d'analyser le concept du temps de travail à l'ère du numérique. Il le fait en explorant l'écart apparent entre les notions de travail et de repos de jure, en particulier au Canada, et la façon dont les gens organisent leur temps de travail de facto, compte tenu des progrès technologiques leur permettant de travailler à distance.

Ces nouveaux défis que rencontre la notion de temps de travail ont conduit à deux propositions principales quant à sa réglementation. La première souhaite revenir à la notion classique de temps de travail et délimiter l'horaire de travail. La seconde souhaite accueillir les nouvelles capacités technologiques permettant de travailler à toute heure et en tout lieu et fait abstraction du rôle dominant que joue le temps en droit du travail. Cet article soutient que ces modèles antagonistes n'offrent que des solutions partielles et souffrent tous deux de lacunes importantes : soit ils ignorent les changements spectaculaires introduits dans le monde par les technologies numériques, soit, et pire encore, ils ignorent les idéaux et objectifs fondamentaux des droits liés au travail.

En se basant sur cette tension entre le droit du travail et la technologie, cet article propose un nouveau paradigme de réglementation du temps de travail — un paradigme qui permettrait de réconcilier la logique et la structure de flexibilité du monde numérique avec les principes fondamentaux du droit du travail. Cet article propose donc des règles par défaut qui assurent une protection de base au salarié et maintient l'idée que les salariés doivent être rémunérés pour leur temps de travail réel et bénéficier d'un véritable temps de repos pendant la journée de travail. Cette protection est possible par le format et la logique des technologies de communication de l'information. En même temps, cet article suggère que les règles par défaut permettront également aux parties de négocier et de s'entendre sur la valeur financière des heures de travail supplémentaires d'une manière qui tient compte tant des nouvelles possibilités de l'ère numérique que des objectifs du droit du travail.

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Introduction	381
I. Time in Labour Law	383
II. Time and the Digital Reality: The Case of ICT and Telework	386
<i>A. Formal Telework</i>	387
1. Meaning and Scope	387
2. The Implications of Formal Telework for the Notion of Working Time	389
<i>B. Sporadic Working Hours and Being Constantly Online for Work</i>	390
1. On the Third Generation of Telework, Time Porosity, and “W-est”	390
2. The Implications of Time Porosity for the Notion of Working Time	391
III. Regulation of the Telework Dilemma: Between Two Ends	393
<i>A. The Right to Disconnect</i>	393
<i>B. Avoiding Time Calculation and Shifting to Other Forms of Payment</i>	399
IV. Turning to a Third Form of Regulation	403
<i>A. How Should We Devise Regulation in the Digital Reality?</i>	403
<i>B. The Role of the Employee Representatives</i>	405
<i>C. The Proposed Model</i>	409
1. Everything Counts, Everything Is Transparent	409
2. Estimating the Working Time	412
<i>a. Time Porosity</i>	415
3. The Right to Have a Break: Where Do We Go from Here?	417
Conclusion	418

Introduction

Employment and Social Development Canada (ESDC) intends to modernize labour standards and in 2018 published a report summarizing the views heard in public consultations.¹ One of the main points made by unions and labour organizations, employers and employer organizations, academics, advocacy groups, and other experts is that the concept of working time must be updated to be applicable to the modern age.² The report refers specifically to the problem of work intruding on individuals' personal lives due to the new technological ability to conduct work from a distance. For example, the report cites an online survey respondent as stating, "I have seen in my own family my husband burn-out and get severely sick from working around the clock and constantly being 'on' for his project management job. I would love to see the government set a tone and limit work beyond normal working hours."³ According to the report, 93 per cent of the survey respondents believed that employees should have a right to refuse to respond to work-related communication outside of working hours (i.e., they should have a "right to disconnect").⁴ Referring to other initiatives around the world, the Canadian government identified the issue of constant work in the modern world as a target for regulation in 2019, with the focus on the right to disconnect.⁵

¹ See Employment and Social Development Canada, *What We Heard: Modernizing Federal Labour Standards* (Report) (Ottawa: ESDC, August 2018), online (pdf): <www.canada.ca> [perma.cc/Y9K7-J9WV].

² See *ibid* at 10–11.

³ *Ibid* at 10.

⁴ On the right to disconnect, see Part IIIA, "The Right to Disconnect", *below*. A similar survey conducted by the European Trade Union Confederation (ETUC) showed that "no other issue gained more attention and replies from trade union and company workers representatives than working time": see Eckhard Voss & Hannah Riede, "Digitalisation and Workers Participation: What Trade Unions, Company Level Workers and Online Platform Workers in Europe Think" (September 2018) at 29, online (pdf): *ETUC* <www.etuc.org> [perma.cc/K6CT-5H9Y].

⁵ For reports on the government's plans, see Jordan Press, "Should Canadian Workers Have the 'Right to Disconnect'? Question Studied as Liberals Plan Labour Code Rewrite", *Global News* (3 September 2018), online: <globalnews.ca> [perma.cc/WU8C-2LPY]; Marc Montgomery, "The 'Right to Disconnect': Canadian Government Studies New Policy", *Radio Canada International* (4 September 2018), online: <www.rcinet.ca> [perma.cc/JNU4-DBEF]. See also Employment and Social Development Canada, *Disconnecting from Work-Related E-Communications Outside of Work Hours*, by the Secretariat to the Expert Panel on Modern Federal Labour Standards (Issue Paper) (Ottawa: ESDC, January 2019), online (pdf): <www.canada.ca> [perma.cc/DL2P-CTGX]. Note also that in Quebec, a bill on the right to disconnect was proposed in March 2018: Bill 1097, *Right-to-Disconnect Act*, 1st Sess, 42nd Leg, Quebec, 2018 (presented 22 March 2018).

Canada is clearly not alone in this challenge. Countries around the world are becoming occupied with the question of working time in the digital reality due to the technological ability to conduct work from a distance.⁶ This article contributes to this discussion on working time and puts forward proposals for regulation that can be seen as giving content to the amorphous right to disconnect, while also adding additional elements that work toward an optimal solution.

To address the problem of working time in the digital reality, this article uses an interdisciplinary methodology and sheds light on the legal, sociological, and internet literature on the subject matter. It explores the apparent gap between the traditional notion of working time, as it appears in Canadian law, and the actual way in which people work today beyond the traditional framework of time and space.⁷ The article begins by describing the increased ability to work from a distance through the use of information communication technology (ICT), which is now present in almost every household. The ability to work from a distance is referred to in the literature as “telework,” “mobile work,” or “ICT mobile work” (ICTM),⁸ which exists in two main forms: one is formal and the other is sporadic, informal, and distributed throughout the day. Both forms of telework have become more popular in recent years. The article elaborates on these two forms of telework, their frequency, and their implications for working time, rest time, and other labour rights.

The article then addresses the question of regulation. The evolution of working time, and particularly the evolution of the ability to conduct telework, has led to two general responses. Each response originates in a different field and stems from different foundations and motivations. The first response is situated in the field of law and stems from labour rights. This response includes attempts to return to the classical concept of working time and to restrict the working time schedule. This position is embodied in the right to disconnect, as mentioned in the ESDC report. The second response emanates from the field of new management and stems from notions of efficiency and flexibility. It celebrates the new technological ability to conduct work at any time and in any place. It advocates moving past the dominant role of time in labour regulation. The article demonstrates how these two opposing models provide only partial solutions to the working

⁶ See Voss & Riede, *supra* note 4 at 29.

⁷ See e.g. Harry W Arthurs, “The Transformation of Work, the Disappearance of ‘Workers’, and the Future of Workplace Regulation” (2009) Osgoode Hall Law School of York University Working Paper No 4, online (pdf): <digitalcommons.osgoode.yorku.ca> [perma.cc/Y98F-TWXW] (demonstrating how the notion of work has changed in the modern age and the ways in which the modern workplace has become more technological and flexible).

⁸ International Labour Office, *General Survey Concerning Working-Time Instruments: Ensuring Decent Working Time for the Future*, Report III(B), 107th Sess (2018) at 267, online (pdf): <www.ilo.org> [perma.cc/393L-YGHX] [ILO, *General Survey*].

time dilemma and suffer from crucial deficiencies: they either ignore the dramatic changes in the digital reality and do not offer any pragmatic way to deal with these changes, or worse, they ignore the basic principles of labour rights.

With this background, this article offers several basic proposals for an alternative model of regulation to resolve the working time dilemma. The proposals are based on the same purposes underlying the right to disconnect, but also take into consideration general goals of regulation in the modern digital age, such as autonomy and flexibility, as well as the need for clear and specific rules. This article thereby proposes default rules that provide basic protection to the employee and retain the idea that employees should be compensated for their actual working time and enjoy genuine rest time during the workday. This protection is enabled through the format and logic of ICT. At the same time, the default rules will also enable the parties to negotiate and agree on the financial value of additional working hours in a way that takes into account the new possibilities of the digital age, particularly regarding flexibility and autonomy.

The article proceeds as follows: Part I addresses the role of time in Canadian labour law and elaborates on the centrality of working time in the labour field. Part II focuses on the widespread use of ICT and the global phenomenon of telework. It elaborates on the two main formats in which work can be carried out remotely and discusses the impact of telework on working time and the rights related to it. Part III presents the two opposing responses to the working time dilemma in the digital reality. After discussing the deficiencies of the current models, Part IV offers a new framework of working time regulation that takes into consideration both the purposes of labour law and the logic and structure of the digital world.

I. Time in Labour Law

Time is an important component of labour law. Many Canadian provinces, like legal systems elsewhere, aim to organize working time and connect it to the employee's salary and rights. Canadian provinces set an hourly minimum wage.⁹ The working day is divided into time units and provides the employee concrete "eating periods" after a certain number of working hours.¹⁰ The working day or week is usually limited to a certain number of hours, and with some exceptions, the employer cannot keep the employee working for more than the maximum permissible number of time

⁹ In Ontario, see *Employment Standards Act, 2000*, SO 2000, c 41, s 23.1(1) [*Employment Act*]. In Quebec, see *Act respecting labour standards*, CQLR c N-1.1, s 89(1) [*Labour Standards*] (note that the Quebec law explicitly enables payments based on output instead of time).

¹⁰ See e.g. *Employment Act*, *supra* note 9, s 20(1); *Labour Standards*, *supra* note 9, s 79.

units.¹¹ It is also common for employees to receive overtime payment if they exceed a certain number of time units of work per day or month.¹² The employee is entitled to rest hours free from work at the end of every working day as well as a rest day free from work every week or two weeks.¹³ Lastly, the employee is entitled to sick leave, holiday leave, and vacation leave.¹⁴ The frequency, exact scope, and length of the leave times are dependent on the employee's number of working hours and the hourly wage.¹⁵

The notion of time in labour law, and of working time in particular, is considered “a social construction arising from evolving economic necessity and changes in what is perceived to be humane hours of work.”¹⁶ During the industrial revolution, the idea began to develop that working time should be distinguished from other time units of life, as did the notion of an hourly workforce.¹⁷ The concept of working time was understood from diverse socio-economic perspectives and interests. Marx was among the first who perceived working time as a way to turn labour power into a commodity that was traded by the employee to earn a living.¹⁸ Thompson expanded on this Marxist notion of time as a currency. He argued that in industrial capitalism, time is a tool for disciplining employees: the employer controls employees by controlling their time. Employers govern their

¹¹ See e.g. *Employment Act*, *supra* note 9, s 17; *Labour Standards*, *supra* note 9, s 52 (dealing with maximum working hours per week).

¹² See e.g. *Employment Act*, *supra* note 9, s 22; *Labour Standards*, *supra* note 9, s 55.

¹³ See e.g. *Employment Act*, *supra* note 9, ss 18(1), 18(4); *Labour Standards*, *supra* note 9, s 78.

¹⁴ See e.g. *Employment Act*, *supra* note 9, Parts XI, XIV; *Labour Standards*, *supra* note 9, ss 79.1, 59.1–62.

¹⁵ See *ibid.*

¹⁶ Robert C Bird, “Why Don’t More Employers Adopt Flexible Working Time?” (2015) 118:1 *W Va L Rev* 327 at 330.

¹⁷ As Harvey explained, work is based on time and space, since “labor power has to go home every night”: see David Harvey, *The Urban Experience* (Baltimore: Johns Hopkins University Press, 1989) at 19. See also Mark Graham & Mohammad Amir Anwar, “Labour” in James Ash, Rob Kitchin & Agnieszka Leszczynski, eds, *Digital Geographies* (Los Angeles: Sage, 2019) 177 (for a discussion of how time, labour, and geography are affected by the digital economy); Émilie Genin, “Proposal for a Theoretical Framework for the Analysis of Time Porosity” (2016) 32:3 *Intl J Comp Lab L & Ind Rel* 280 at 282 [Genin, “Proposal for a Theoretical Framework”]. See generally EP Thompson, “Time, Work-Discipline, and Industrial Capitalism” (1967) 38 *Past & Present* 56.

¹⁸ See generally Karl Marx, *Capital: A Critique of Political Economy*, ed by Frederick Engels, translated by Samuel Moore & Edward Aveling (New York: International Publishers, 1967) vol 1 at 233; Moishe Postone, *Time, Labor, and Social Domination: A Reinterpretation of Marx’s Critical Theory* (Cambridge, UK: Cambridge University Press, 1993) at 292–99.

employees' conduct during the workday and ensure that it is not "wasted" on activities other than work.¹⁹

This notion of employment remains relevant today.²⁰ During official working time, employees and their time are considered to be subordinate to the employer's will and labour tasks.²¹ Unless otherwise agreed upon, the employee is free to conduct private tasks only once the working day is over.²²

Today, working time regulation is considered to be "one of the most important objectives of labour law and collective bargaining" around the world.²³ Working time regulation is perceived as particularly important from the employee's perspective, as it seems to have the most direct impact on employees in the workplace and in their personal lives.²⁴ Research demonstrates that the organization of working time has profound effects on the physical and mental health of employees and on their well-being.²⁵ Overwork without clear breaks during the day and between working days can cause exhaustion, illness, and mental health issues, as well as disturbances to the employee's normal routine with family and friends.²⁶ Limits on the duration of work and the obligation to pay for work are also related to the employee's dignity. Employees are entitled to enjoy break time and to be fully compensated for all the work they have performed; they are not merely a tool for the employer's productivity and profit that can be used all day long.²⁷ Moreover, due to the employee's social and psychological dependence on the employer, working hour regulations are needed to ensure that basic rights (hourly minimum wage, overtime payment, breaks, etc.) do not depend on the employer's goodwill.²⁸

¹⁹ See Thompson, *supra* note 17 at 61, 82–86.

²⁰ See Hugh Collins, "The Right to Flexibility" in Joanne Conaghan & Kerry Rittich, eds, *Labour Law, Work, and Family: Critical and Comparative Perspectives* (New York: Oxford University Press, 2005) 99 at 100–03.

²¹ See Bird, *supra* note 16 at 345.

²² See Alain Supiot, "On-the-Job Time: Time for Agreement" (1996) 12:3 Intl J Comp Lab L & Ind Rel 195 at 196.

²³ Simon Deakin & Gillian S Morris, *Labour Law*, 6th ed (Oxford: Hart, 2012) at 332.

²⁴ See ILO, *General Survey*, *supra* note 8 at para 4.

²⁵ See *ibid*; Hani Ofek-Ghendler, "Weisure Time: Between Work and Leisure in the Digital Era" (2017) 40:1 Tel Aviv UL Rev 5 at 5, 12–16; Guy Davidov, *A Purposive Approach to Labour Law* (Oxford: Oxford University Press, 2016) at 125 [Davidov, *Purposive Approach to Labour Law*].

²⁶ See ILO, *General Survey*, *supra* note 8 at para 4.

²⁷ See Ofek-Ghendler, *supra* note 25 at 16–17; Davidov, *Purposive Approach to Labour Law*, *supra* note 25 at 125; Guy Davidov, "The Goals of Regulating Work: Between Universalism and Selectivity" (2014) 64:1 UTLJ 1 at 23.

²⁸ See Davidov, *Purposive Approach to Labour Law*, *supra* note 25 at 125.

For these reasons, working time regulation is also important for society as a whole. Moreover, limiting the working time of each employee can ensure that more people can enjoy employment opportunities,²⁹ thus reducing the level of unemployment in society.³⁰ The regulation of working time and payment is also justified to ensure the competitiveness of the market.³¹ As the International Organisation of Employers has observed, an “appropriate working-time regulation can play an important role in the development of rules for the effective organization of working time, which has an important effect on enterprise performance, productivity and competitiveness.”³² The concept of working time is therefore crucial in labour law.³³ However, the digital reality puts significant strain on the idea of working time units that require compensation and on the distinction between working time units and other time units of our lives. The next section will identify the implications of this change.

II. Time and the Digital Reality: The Case of ICT and Telework

One of the implications of the digital reality is that the once clear and fixed boundaries of time and place have become blurry and amorphous.³⁴ To understand this implication in the concrete context of labour law, we must understand the impact of information technology and ICT on society and labour. ICT is the technological infrastructure that enables people to access, transfer, use, and store information on the internet.³⁵ ICT enables employees to easily receive information and transfer it to the workplace, as well as be available for work tasks outside of the workplace at considerably lower financial cost.³⁶ As a result of this, the daily routines of many office

²⁹ See Ofek-Ghendler, *supra* note 25 at 17–18. See also Jane Friesen, “Overtime Pay Regulation and Weekly Hours of Work in Canada” (2001) 8:6 *Labour Economics* 691 at 708.

³⁰ See ILO, *General Survey*, *supra* note 8 at para 6; Ofek-Ghendler, *supra* note 25 at 17–18. See also Friesen, *supra* note 29 at 693.

³¹ See ILO, *General Survey*, *supra* note 8 at para 6; Ofek-Ghendler, *supra* note 25 at 17–19.

³² ILO, *General Survey*, *supra* note 8 at para 5.

³³ See Barbara Adam, *Time and Social Theory* (Cambridge, UK: Polity Press, 1990) at 104–26.

³⁴ See Zygmunt Bauman, “Time and Space Reunited” (2000) 9:2/3 *Time & Society* 171 at 174–79.

³⁵ For basic definitions, see James Murray, “Cloud Network Architecture and ICT” (18 December 2011), online (blog): *IT Knowledge Exchange* <www.itknowledgeexchange.techtarget.com> [perma.cc/JEC9-V2ML].

³⁶ See Richard B Freeman, “The Labour Market in the New Information Economy” (2002) 18:3 *Oxford Rev Economic Policy* 288 at 291, 299. See also Tracey Crosbie & Jeanne Moore, “Work-Life Balance and Working from Home” (2004) 3:3 *Soc Policy & Society* 223 at 223–33. For more on this way of working, see generally JH Erik Andriessen & Matti

workers have changed.³⁷ Employees are now increasingly working outside formal offices in diverse formats of what is defined as “telework” (or ICTM or mobile work).³⁸ Telework refers to “all types of technology-assisted work conducted outside of a centrally-located workspace.”³⁹

There are many forms of telework. For the purposes of this article, I will divide telework into two categories: formal telework and sporadic telework.⁴⁰ These two types of telework take on different shapes and have different motivations, but both blur the notion of working time units—with implications for break time, maximum permissible working time, overtime payment, and so on. In the following sections, I will elaborate further on each form of telework and discuss their implications for the notion of working time.

A. *Formal Telework*

1. Meaning and Scope

Formal telework refers to a workplace arrangement in which employees have a formal agreement with their employers that explicitly enables them to conduct some of their work outside of the office at their preferred times.⁴¹ Formal telework is associated with preferable schedule arrangements for the employee.⁴² Many employees choose to work from home because it provides

Vartiainen, eds, *Mobile Virtual Work: A New Paradigm?* (Berlin: Springer, 2006); Eurofound & International Labour Office, *Working Anytime, Anywhere: The Effects on the World of Work* (Luxembourg & Geneva: Publications Office of the European Union & the International Labour Office, 2017), online (pdf): <www.ilo.org> [perma.cc/A9BT-8WZ4] [Eurofound & ILO, *Working Anytime, Anywhere*]. For further implications of ICT, see also Kenneth G Dau-Schmidt, “Labor Law 2.0: The Impact of New Information Technology on the Employment Relationship and the Relevance of the NLRA” (2015) 64 Emory LJ 1583 at 1594–97; Miriam A Cherry & Winifred R Poster, “Crowdwork, Corporate Social Responsibility, and Fair Labor Practices” in F Xavier Olleros & Majlinda Zhegu, eds, *Research Handbook on Digital Transformations* (Cheltenham: Edward Elgar, 2016) 291.

³⁷ See Graham & Anwar, *supra* note 17 at 177–83.

³⁸ See Eurofound & ILO, *Working Anytime, Anywhere*, *supra* note 36 at iv.

³⁹ WC Bunting, “Unlocking the Housing-Related Benefits of Telework: A Case for Government Intervention” (2017) 46:3 Real Est LJ 1 at 3–4. See also R Kelly Garrett & James N Danziger, “Which Telework? Defining and Testing a Taxonomy of Technology-Mediated Work at a Distance” (2007) 25:1 Soc Science Computer Rev 27 at 28.

⁴⁰ For different classifications, see the text accompanying notes 68–70, *below*.

⁴¹ See e.g. Treasury Board of Canada Secretariat, “Telework Policy” (2017), online: *Government of Canada* <www.tbs-sct.gc.ca> [perma.cc/KL3D-WRQK] (the telework policy of the Canadian government that enables federal public service employees to request occasional telework).

⁴² See *ibid*. See also Canadian Centre for Occupational Health and Safety, “Telework/Telecommuting” (22 October 2019), online: *Government of Canada* <www.canadabusiness.ca> [perma.cc/4JMJ-BWHC]; Transport Canada, “Telework in Canada” (last modified 25 August 2010), online: *Government of Canada* <www.data.tc.gc.ca> [perma.cc/TSR5-JXT4].

more flexibility and freedom of movement, allows them to enjoy a less stressful work environment, and enables them to be more efficient.⁴³ Telework also strengthens employees' feelings of autonomy and control over their work.⁴⁴ Many parents, particularly mothers, prefer to conduct telework to facilitate better work-life balance.⁴⁵

Although some scholars argue that the expansion of formal telework is much slower than expected,⁴⁶ it has become a widespread phenomenon.⁴⁷ In 2013, the Arcus Human Capital Survey demonstrated that 18 per cent of its respondents had conducted telework.⁴⁸ As of 2018, according to the Canadian Internet Registration Authority, 54 per cent of Canadians with home internet conducted telework at least occasionally, while 20 per cent did so very often.⁴⁹ Moreover, the Canadian government has implemented a pro-telework policy for employees in the federal public service that enables them to request permission to occasionally conduct telework.⁵⁰ An EU study from 2017 stated that “[t]he incidence of T/ICTM work varies substantially across countries, ranging between 2% and 40% of all employees, depending on the particular country and the frequency with which employees carry out T/ICTM work.”⁵¹

⁴³ See Melissa Gregg, *Work's Intimacy* (Cambridge, UK: Polity Press, 2011) at 39–40.

⁴⁴ See Phyllis Moen et al, “Does a Flexibility/Support Organizational Initiative Improve High-Tech Employees' Well-Being? Evidence from the Work, Family, and Health Network” (2016) 81:1 *American Sociological Rev* 134 at 146, 155–56; Phyllis Moen, Erin L Kelly & Rachelle Hill, “Does Enhancing Work-Time Control and Flexibility Reduce Turnover? A Naturally Occurring Experiment” (2011) 58:1 *Soc Problems* 69 at 86; Eurofound, *Work-Life Balance and Flexible Working Arrangements in the European Union*, Ad Hoc Report (Dublin: Eurofound, 2017) at 5–7, online (pdf): <www.eurofound.europa.eu> [perma.cc/Q4MW-7B6D].

⁴⁵ See Émilie Genin, “The Third Shift: How Do Professional Women Articulate Working Time and Family Time?” in Sarah De Groof, ed, *Work-Life Balance in the Modern Workplace: Interdisciplinary Perspectives from Work-Family Research, Law and Policy* (Alphen aan den Rijn: Wolters Kluwer, 2017) 103 at 103, 108–09 [Genin, “The Third Shift”].

⁴⁶ See Eurofound & ILO, *Working Anytime, Anywhere*, *supra* note 36 at 3. But see *ibid* at 13–20 (where this report presents data supporting the opposite argument).

⁴⁷ See *ibid* at 4.

⁴⁸ See Melody McKinnon, “Remote Hiring, Virtual Employment and Telecommuting in Canada” (12 April 2017), online: *Canadian's Internet Business* <www.canadiansinternet.com> [perma.cc/7AZF-T3VZ].

⁴⁹ See Canadian Internet Registration Authority, “Canada's Internet Factbook 2018: Canada's Source for Current Internet Data” (2018), online: *Canadian Internet Registration Authority* <www.cira.ca> [perma.cc/FLZ2-GPBN].

⁵⁰ See Treasury Board of Canada Secretariat, “Telework Policy”, *supra* note 41. See also Canadian Grain Commission, “Audit of Alternative Working Arrangements: Audit and Evaluation Services Final Report” (last modified 28 February 2019) at 2, online (pdf): *Canadian Grain Commission* <www.grainscanada.gc.ca> [perma.cc/PT7V-N76H].

⁵¹ Jon C Messenger, “Working Anytime, Anywhere: The Evolution of Telework and Its Effects on the World of Work” (March 2017) at 305, online (pdf): *Universitat Pompeu Fabra* <www.upf.edu> [perma.cc/LCZ2-DD7W].

Countries that especially favour telework are Finland, Japan, the Netherlands, Sweden, and the United States.⁵²

Formal telework has become common in numerous fields and occupations,⁵³ particularly middle-income and high-income occupations that are information-based and require concentration and autonomy.⁵⁴ It is most common among professionals and managers, but also occurs among clerical support and sales workers.⁵⁵ At the periphery of formal telework is the phenomenon of “full” teleworkers who work only from home, and either rarely or never attend any formal workplace. ICT increased the number of these positions for both highly paid knowledge workers and low-paying jobs in the sales and service sectors.⁵⁶

2. The Implications of Formal Telework for the Notion of Working Time

Formal teleworkers supposedly work the same number of hours at home as they would in the office. In practice, however, formal telework often substitutes time “from leisure to production.”⁵⁷

A Canadian study using data from 1999 to 2001 demonstrated that already at that point in time, out of the 8–9 per cent of the workforce that engaged in telework, a third performed unpaid work at home beyond the formal work arrangement.⁵⁸ A comprehensive comparative study by the International Labour Office (ILO) and Eurofound reported that across Europe, teleworkers “tend to work longer hours than average employees.”⁵⁹ A subsequent EU study explained that telework “leads to working beyond normal/contractual working hours, which often appears to be unpaid.”⁶⁰ Many teleworkers tend to work “all the time” and often must be available

⁵² See *ibid* at 304.

⁵³ See Walker Ladd, “Telecommuting and Health: Perspectives on the Paradox of Productivity” (7 April 2018), online (blog): *University of Phoenix* <www.research.phoenix.edu/perma.cc/LCB3-GGBY>.

⁵⁴ See *ibid*. Regarding Europe, see Eurofound & ILO, *Working Anytime, Anywhere*, *supra* note 36 at 18.

⁵⁵ See Messenger, *supra* note 51 at 305.

⁵⁶ See Penny Gurstein, *Wired to the World, Chained to the Home: Telework in Daily Life* (Vancouver: UBC Press, 2001) at 80. See also Susanne Tietze & Gill Musson, “The Times and Temporalities of Home-Based Telework” (2003) 32:4 *Personnel Rev* 438 at 447–50.

⁵⁷ David H Autor, “Wiring the Labor Market” (2001) 15:1 *J Economic Perspectives* 25 at 28–29. See also Mary C Noonan & Jennifer L Glass, “The Hard Truth About Telecommuting” (2012) 135:6 *Monthly Labor Rev* 38 at 39.

⁵⁸ See Linda Schweitzer & Linda Duxbury, “Benchmarking the Use of Telework Arrangements in Canada” (2006) 23:2 *Can J Administrative Sciences* 105 at 112.

⁵⁹ Eurofound & ILO, *Working Anytime, Anywhere*, *supra* note 36 at 21–23.

⁶⁰ Messenger, *supra* note 51 at 306.

to work for the entire day, without any genuine ability to distinguish between work time and non-work time or to enjoy a real break.⁶¹

Thus, even though this form of telework is supposedly organized and bound to a formal work setting, it leads to more working time units for which the employee is not fully paid and to more blurriness between working time and leisure time units.

B. Sporadic Working Hours and Being Constantly Online for Work

1. On the Third Generation of Telework, Time Porosity, and “W-est”

As a result of new technologies, ICT has not only enabled employees to work remotely in accordance with a formal agreement with their employers, but has also generated new forms of remote work for many other employees who are not considered teleworkers. Many employees who are formally required to work only a concrete shift in the workplace find themselves also working at home during their leisure time.⁶² This sort of working time at home is invisible and not explicitly included in an employment contract, nor is it formally planned in advance.⁶³ It is frequently conducted alongside the private tasks of an employee.⁶⁴

Thus, due to the common use of smart devices that can be used for both work and entertainment, such as cellphones or tablets,⁶⁵ the notion of telework has changed and is gaining additional dimensions; it is becoming less organized and much more ad hoc.⁶⁶ This form of telework is most reflected by employees’ tendency to occasionally check emails on their cellphones during what is supposed to be their leisure time. It is also apparent when employees receive and respond to professional texts or WhatsApp messages during evenings or weekends, take work-related phone calls outside the

⁶¹ See Eurofound & ILO, *Working Anytime, Anywhere*, *supra* note 36 at 24, 29.

⁶² See Jon C Messenger & Lutz Gschwind, “Three Generations of Telework: New ICTs and the (R)evolution from Home Office to Virtual Office” (2016) 31:3 *New Technology, Work & Employment* 195 at 202–04.

⁶³ See Ofek-Ghendler, *supra* note 25 at 7–8.

⁶⁴ See *ibid.*

⁶⁵ See Jacob Silverman, *Terms of Service: Social Media and the Price of Constant Connection* (New York: Harper, 2015) at 336.

⁶⁶ See Messenger & Gschwind, *supra* note 62 at 199–200. See also Michael Bittman, Judith E Brown & Judy Wajcman, “The Mobile Phone, Perpetual Contact and Time Pressure” (2009) 23:4 *Work, Employment & Society* 673; Judy Wajcman, Michael Bittman & Judith E Brown, “Families Without Borders: Mobile Phones, Connectedness and Work-Home Divisions” (2008) 42:4 *Sociology* 635.

office, and plan their workdays in the evenings using social media, scheduling software, or chat programs.⁶⁷

A useful description of this phenomenon is embedded in the phrase “third generation of telework,” which refers to the extended ability to conduct telework.⁶⁸ Genin defines this change in telework as “time porosity,” which refers to “contemporary forms of interference between working time and personal time, transcending the traditional opposition between work and non-work.”⁶⁹ Ofek-Ghendler refers to this phenomenon as “w-rest,” a combination of work and rest.⁷⁰

2. The Implications of Time Porosity for the Notion of Working Time

The phenomenon of time porosity has crucial implications for an employee’s work-life balance. Since we are considering numerous sporadic moments that are not included in the formal working hours for which the employee is paid, it is extremely difficult to calculate and estimate their total number or frequency.⁷¹ A 2015 online survey by the Angus Reid Institute examined the scope of this phenomenon in Canada, showing that 41 per cent of the respondents who used technology in their daily work regularly checked their professional emails or texts outside of regular office hours, and around 31 per cent also responded to some of these emails or texts outside of official working hours.⁷² A similar result was found in Genin’s empirical study based on data from Canada: as a result of ICT and the increasing number of obligations to both work and family, around 50 per

⁶⁷ See Messenger & Gschwind, *supra* note 62 at 202; Gregg, *supra* note 43 at 14–15, 47, 58–60. See generally Gregor Maier, Fabian Schneider & Anja Feldmann, “A First Look at Mobile Hand-Held Device Traffic” in Arvind Krishnamurthy & Bernhard Plattner, eds, *Passive and Active Measurement: 11th International Conference, PAM 2010* (Berlin: Springer, 2010) 161 (on the use of mobile devices throughout the day).

⁶⁸ Messenger & Gschwind, *supra* note 62 at 202–04 (the authors define the ability to conduct work from home as the first generation of telework, the ability to conduct work everywhere by using mobile devices as the second generation of telework, and the ability to conduct work in less formal and regulated intermediate spaces as the third generation of telework).

⁶⁹ Genin, “Proposal for a Theoretical Framework”, *supra* note 17 at 281.

⁷⁰ I offer here an English version to Ofek-Ghendler’s Hebrew term, “anucha” (Ofek-Ghendler, *supra* note 25).

⁷¹ There are only a few studies measuring the average amount of time employees spend online or on their phones during their leisure time in order to complete sporadic tasks related to their work: see e.g. Messenger & Gschwind, *supra* note 62 at 200; Aaron David Waller & Gillian Ragsdell, “The Impact of E-mail on Work-Life Balance” (2012) 64:2 *Aslib Proceedings* 154 at 162–63. For similar research, see also Emily Rose, “The New Politics of Time” (2018) 34:4 *Intl J Comp Lab L & Ind Rel* 373 at 382–86.

⁷² See “Canadians at Work: Technology Enables More Flexibility, But Longer Hours Too; Checking In Is the New Normal” (9 February 2015) at 10, online (pdf): *Angus Reid Institute* <angusreid.org> [perma.cc/5JMR-6ZSR].

cent of the respondents who were mothers stated that they “systematically resume work in the evening (one hour on average) to be able to leave the office in time to pick up their children.”⁷³ Genin clarifies that this form of “work at home is rarely formal telework (i.e., framed by a work contract) and it mostly takes place beyond regular office hours. Working a third shift thus often remains informal and unseen work.”⁷⁴

Time porosity is especially common for employees in senior positions, who report sacrificing family time in order to devote more time to constant remote work.⁷⁵ It is also common among junior employees, who are often implicitly required to be constantly connected and available online to their employers.⁷⁶ These sporadic moments of work have also become the reality in occupations that are not considered to be traditional office work, since many of them use computers and cellphones as an integral part of the daily work routine.⁷⁷ Doctors, social workers, and teachers, for example, along with many other employees whose core work is to constantly engage in human interactions with clients, are also expected to occasionally check emails or WhatsApp messages from home and to be constantly available online or over the phone.⁷⁸ Thus, time flexibility has also penetrated the traditional offline labour market and made employees’ working schedules and time more fluid than ever before.⁷⁹ In other words, the digital reality seems to be setting new standards of time fluidity and flexibility for all industries.⁸⁰

⁷³ Genin, “The Third Shift”, *supra* note 45 at 108. See also Greet Vermeulen et al, “Reconciliation of Work and Private Life as Key Element for Sustainable Work Throughout the Life Course” in De Groof, *supra* note 45, 359 at 364–65.

⁷⁴ Genin, “The Third Shift”, *supra* note 45 at 109.

⁷⁵ See e.g. Linda Duxbury et al, “From 9 to 5 to 24/7: How Technology Has Redefined the Workday” in Wai K Law, ed, *Information Resources Management: Global Challenges* (Hershey, Pa: Idea Group, 2007) 305. See also Noelle Chesley, “Blurring Boundaries? Linking Technology Use, Spillover, Individual Distress, and Family Satisfaction” (2005) 67:5 *J Marriage & Family* 1237.

⁷⁶ See Gregg, *supra* note 43 at 56–60, 64–66. See also Rose, *supra* note 71 at 373–76.

⁷⁷ See Judy Wajcman, *Pressed for Time: The Acceleration of Life in Digital Capitalism* (Chicago: University of Chicago Press, 2015) at 92–93.

⁷⁸ See *ibid* at 95–97; Ursula Huws, *The Making of a Cybertariat: Virtual Work in a Real World* (New York: Monthly Review Press, 2003) at 164–65 [Huws, *The Making of a Cybertariat*].

⁷⁹ Regarding Europe, see Willem Pieter De Groen & Ilaria Maselli, “The Impact of the Collaborative Economy on the Labour Market” (June 2016) Centre for European Policy Studies Special Report No 138 at 14–15, online (pdf): <ec.europa.eu> [perma.cc/7KPR-U3KW]. See also Valerio De Stefano, “The Rise of the ‘Just-in-Time Workforce’: On-Demand Work, Crowdwork, and Labor Protection in the ‘Gig-Economy’” (2016) 37:3 *Comp Lab L & Pol’y J* 471 at 480–82.

⁸⁰ See De Groen & Maselli, *supra* note 79 at 14–15. Regarding the United States, see Daphné Valsamis, An De Coen & Valentijn Vanoeteren, “The Future of Work: Digitalisation in the US Labour Market” (2016) at 26–27, online (pdf): *European Parliament* <www.europarl.europa.eu> [perma.cc/F3UQ-7Y8T].

III. Regulation of the Telework Dilemma: Between Two Ends

The digital reality may have created new standards of work in the form of more flexible and fluid work arrangements, but this does not necessarily mean that the notion of working time is not relevant in today's world. The purpose of ensuring the mental and physical health, well-being, and dignity of the employee is still relevant and vital.⁸¹ In fact, due to the constant connectivity to work, there seems to be an even greater need to protect the well-being and health of employees and to ensure that employers do not use their power to compel employees to work all day.⁸² At the same time, the digital reality, and ICT in particular, also strengthens and enables positive outcomes for the employee, such as enhanced flexibility and autonomy in work arrangements, which are worth preserving.⁸³ It is therefore necessary to consider how to regulate working time and time-based salaries for employees who engage in different forms of telework, given the unique difficulties and opportunities associated with the digital reality.

In this section, I present two opposing ways to deal with the modern working time difficulties. The solutions are based on different motivations. The first solution aims to maintain the classical idea and purposes of working time and thus intends to decrease time fluidity. The second solution seems to celebrate the changes ICT has brought and to abandon the idea of working time, instead preferring goals such as employee flexibility, autonomy, and productivity. As a result, it moves from a time-based salary to performance measures and a performance-based salary. After exploring these two contradictory solutions and their deficiencies, I offer an additional, more nuanced solution that takes into account the purposes of labour law, the interests of all relevant parties, and the uniqueness of the digital reality.

A. *The Right to Disconnect*

The difficulties of having a fixed working time schedule and the inability to distinguish between working and personal time in the age of ICT and telework have caught the attention of governments and social partners in some countries. Restrictions in this context are usually defined as “the right to be disconnected” or “the right to disconnect.” As explained below, this right is in its initial stages of development and has so far been mostly

⁸¹ For more on the purposes of labour law, see the text accompanying notes 24–32.

⁸² For more on the need to protect employees from being compelled to work all day, see the text accompanying notes 147–55, 202–03.

⁸³ For more on benefits associated with formal telework, see the text accompanying notes 41–45.

implemented voluntarily at the sector or company level in a few European countries.⁸⁴

France was the first country with a formal right to be disconnected.⁸⁵ As of 2017, French law requires workplaces with more than fifty employees to start negotiations to define the right of employees to disconnect after their formal working hours in a way that respects their personal and free time.⁸⁶ If the parties cannot reach an agreement, the employer, after consulting with employee representatives, must publish a charter that clarifies the duties and rights of the employees beyond formal working time and allows the right to disconnect.⁸⁷ The French law clarifies that employees cannot be punished if they refuse to answer emails or phone calls outside of their working hours.⁸⁸ In addition, the law requires the parties to negotiate the exact meaning and scope of the right to disconnect, but does not impose any concrete binding rules on how to do so.⁸⁹ Based on this law, in July 2018, the French Court of Cassation (the highest court in the French judiciary) ordered, for the first time, compensation of €60,000 for an employee whose employer failed to respect the right to disconnect outside normal office hours.⁹⁰

Even though the French law seemingly protects the right to disconnect in its simplest meaning, some have questioned its actual ability to protect the right of the employee to enjoy genuine rest time. This is mainly due to the contemporary work culture of non-stop email communications and the fact that the law does not stipulate precise rules for how it should be implemented.⁹¹ Thus, since this is a new policy that aims to modify a common

⁸⁴ See Eurofound & ILO, *Working Anytime, Anywhere*, *supra* note 36 at 50–51.

⁸⁵ See art L2242-17 *Code du travail*; Eurofound & ILO, *Working Anytime, Anywhere*, *supra* note 36 at 50.

⁸⁶ See Eurofound & ILO, *Working Anytime, Anywhere*, *supra* note 36 at 50.

⁸⁷ See *ibid.*

⁸⁸ See Loïc Lerouge, “The Right to Disconnect From the Workplace: Strengths and Weaknesses of the French Legal Framework” in Jo Carby-Hall & Lourdes Mella Méndez, eds, *Labour Law and the Gig Economy: Challenges Posed by the Digitalisation of Labour Processes* (London, UK: Routledge, 2020) 222 at 224.

⁸⁹ See *ibid.* at 227.

⁹⁰ See Cass soc, 12 July 2018, No 17-13.029. See also Henry Samuel, “British Firm Ordered to Pay €60,000 by French Court for Breaching Employee’s ‘Right to Disconnect’ from Work”, *The Telegraph* (1 August 2018), online: <www.telegraph.co.uk> [perma.cc/XD6C-P8TU]; Sarah King, “Should There Be a ‘Right to Disconnect’ for UK Employees?”, *The HR Director* (4 September 2018), online: <www.thehrdirector.com> [perma.cc/UQM3-HVQ4].

⁹¹ See e.g. Michael Mankins, “Why the French Email Law Won’t Restore Work-Life Balance”, *Harvard Business Review* (6 January 2017), online: <hbr.org> [perma.cc/5QMY-J7KH]; Yannick Smet, “The Right to Disconnect” (1 March 2018), online: *Lexology* <www.lexology.com> [perma.cc/B8TL-RFEA].

work culture, in order for it to be implemented effectively, the relevant parties must be provided with concrete tools that will allow them to do so.⁹² In a similar manner, the French law does not provide the relevant law enforcement authorities with the power and the necessary measures to ensure that the right to disconnect is upheld.⁹³ The French right to disconnect is considered to be a “soft law” that forces the relevant parties to negotiate. However, what happens when these negotiations reach a dead end? How can the employees’ rights be enforced in those cases?⁹⁴

This might be why, as Emanuele Dagnino demonstrated, many of the French collective agreements that were made on the basis of the right to disconnect eventually followed “a ‘cut-and-paste’ approach,”⁹⁵ whereby companies followed their obligation to negotiate but did not make any adjustments “to the specific features of the organization and to the specific needs and wills of the workers,” resulting in the “ineffectiveness” of the law.⁹⁶

Additionally, the French law has a limited scope, since it does not apply to small companies (under fifty employees) or to the civil service. Consequently, the French law has created unwanted gaps between these companies and large companies in the private sector regarding an employee’s right to disconnect.⁹⁷

Italy has also established a right to disconnect.⁹⁸ However, the Italian law seems to be even more limited in scope than the French one. Unlike the French law, which is based on collective negotiation, the Italian law is implemented on an individual basis through a specific agreement between an individual employee and employer. Thus, the law is vulnerable to the unequal power dynamics in the workplace.⁹⁹ The Italian law is also limited

⁹² See Mankins, *supra* note 91; Smet, *supra* note 91. See also Lerouge, *supra* note 88 at 227.

⁹³ See Lerouge, *supra* note 88 at 226.

⁹⁴ See *ibid.*

⁹⁵ Emanuele Dagnino, “The Right to Disconnect in the Prism of Work-Life Balance: The Role of Collective Bargaining; A Comparison between Italy and France” in Giuseppe Casale & Tiziano Treu, eds, *Transformations of Work: Challenges for the National Systems of Labour Law and Social Security* (Turin: Giappichelli, 2018) 437 at 440 [Dagnino, “The Right to Disconnect”].

⁹⁶ *Ibid* at 446.

⁹⁷ See Lerouge, *supra* note 88 at 223–24, 226.

⁹⁸ See *Misure per la tutela del lavoro autonomo non imprenditoriale e misure volte a favorire l’articolazione flessibile nei tempi e nei luoghi del lavoro subordinato*, L 81/2017, in GU 135/2017.

⁹⁹ See Dagnino, “The Right to Disconnect”, *supra* note 95 at 439–40, 446; Facundo M Chiufo, “The ‘Right to Disconnect’ or ‘How to Pull the Plug on Work’” (Paper presented at the 4th Labour Law Research Network Conference, Valparaiso, Chile, June 2019) [unpublished] at 7.

to work that is “characterized by spatial and temporal flexibility of the work performance.”¹⁰⁰ This means that the Italian law does not apply to all employees. It applies only to employees who conduct work outside of their employer’s premises, possibly with the use of technological devices, without necessarily having any specific restrictions regarding the working time and the workplace (i.e., it applies only to formal teleworkers).¹⁰¹ Finally, like the French law, the Italian law does not contain any concrete provisions on the exact meaning of the right to disconnect and does not provide any concrete measures for how it should be applied, nor any obligatory minimum standard of protection of the right.¹⁰² Thus, Italian scholars have argued that the Italian right to disconnect “will probably be inefficient for its aims.”¹⁰³

In 2018, Spain also developed a legal right to disconnect.¹⁰⁴ The Spanish law provides both private and public employees with the right to disconnect outside of formal work time.¹⁰⁵ However, just as with the French law, the concrete content of the Spanish right to disconnect is a matter of negotiation between the company and the employee representatives.¹⁰⁶

In Germany, there are no legally binding rules in this regard.¹⁰⁷ However, several voluntary initiatives at German companies (mainly car manufacturers) have emerged in recent years.¹⁰⁸ In 2011, Volkswagen reached an agreement with its employee representatives that employees using BlackBerry smart phones (excluding senior management) would only be able to receive emails on their cellphones half an hour before and after formal working hours.¹⁰⁹ In 2014, the German car company BMW reached an agreement with employee representatives that employees would be allowed to register time spent working outside the employer’s premises as working time, and thus be entitled to compensation for the time spent outside of the workplace reading

¹⁰⁰ Dagnino, “The Right to Disconnect”, *supra* note 95 at 439.

¹⁰¹ See Emanuele Dagnino, “Working Time Regulation in the Age of Working Anytime, Anywhere: Insights from the Italian Regulation of Smart Working” (Paper presented at the 4th Labour Law Research Network Conference, Valparaiso, Chile, June 2019) [unpublished].

¹⁰² See *ibid.*

¹⁰³ Dagnino, “The Right to Disconnect”, *supra* note 95 at 438.

¹⁰⁴ See LO 3/2018, 5 December 2018, *de Protección de Datos Personales y garantía de los derechos digitales*, BOE-A-2018-16673, art 88. See also Chiuffo, *supra* note 99 at 8.

¹⁰⁵ See Chiuffo, *supra* note 99 at 10.

¹⁰⁶ See *ibid* at 10, 13–14.

¹⁰⁷ For a full description of the German legislation on the issue, see Eurofound & ILO, *Working Anytime, Anywhere*, *supra* note 36 at 51.

¹⁰⁸ See Corinna Verhoek, “Anti-Stress Legislation in Germany: How Realistic Is the Prospect?” (30 September 2014), online: *Ius Laboris* <www.globalhrlaw.com> [perma.cc/2KFP-GBFB].

¹⁰⁹ See Tony Paterson, “Out of the Office and Not Taking Emails: Victory for VW Workers”, *Independent* (24 December 2011), online: <www.independent.co.uk> [perma.cc/CMF5-C8HF].

and answering emails.¹¹⁰ Another car company, Daimler, created a policy that enables employees to set their email inboxes on holiday mode. This mode automatically deletes all incoming emails and notifies the sender of alternate contacts.¹¹¹ The German Ministry of Labour created a working time policy in 2013 stating that its managers are not allowed to call or email their staff outside formal working hours (except in emergencies) or to discipline employees who are not available after working hours.¹¹²

The French, Italian, Spanish, and German initiatives are already being implemented, but there has been little significant research on their effects.¹¹³ These regulations of time seem to reduce the possibility of time porosity by encouraging negotiation between the parties on the concrete times at which the employee will be available to work. However, this model also suffers from crucial deficiencies.

First, along with the desirable restrictions on working time, these initiatives may prevent employees from teleworking at their preferred times in lieu of following fixed time arrangements. In other words, this approach could reduce employees' autonomy and flexibility in terms of choosing their exact working time and place. This outcome is most likely with initiatives that completely prevent electronic communication activities at certain times, such as in the German voluntary initiatives that do not enable emailing after a certain hour.¹¹⁴ This sort of outcome is also encountered in the "one-size-fits-all" approach in France, which "cuts-and-pastes" the same rules from one company to another without adjusting them to the specific needs of the employees (or the employer) and to the specific company's nature and functioning.¹¹⁵ The ability to enter and exit work throughout the day, as long as it is recognized and limited to a predefined number of hours to ensure that employees have a genuine rest period, may prove beneficial for both employees and employers in certain circumstances, so banning flexible working hours would be unhelpful.¹¹⁶

¹¹⁰ See Eurofound & ILO, *Working Anytime, Anywhere*, *supra* note 36 at 50.

¹¹¹ See *ibid.*

¹¹² See Jeevan Vasagar, "Out of Hours Working Banned by German Labour Ministry", *The Telegraph* (30 August 2013), online: <www.telegraph.co.uk> [perma.cc/RTN6-7NMY]; Paul M Secunda, "The Employee Right to Disconnect" (2019) 9:1 *Notre Dame J Intl & Comp L* 1 at 29–30.

¹¹³ For further discussion, see generally Secunda, *supra* note 112 at 27–32.

¹¹⁴ See Eurofound & ILO, *Working Anytime, Anywhere*, *supra* note 36 at 45–48.

¹¹⁵ See Dagnino, "The Right to Disconnect", *supra* note 95 at 446.

¹¹⁶ For more on the benefits of flexible working hours, see the text accompanying notes 41–45. For instance, some parents might want to work until their children come back from school, be with their children during the afternoon hours, and then in the evening, when their kids are sleeping, work for a couple more hours.

Second, it appears that the main reason for these sorts of cut-and-paste agreements regarding the right to disconnect is simply that the concerned parties were not provided with any concrete guidance or measures by law on how the right to disconnect should be applied.¹¹⁷ The models encourage the parties to negotiate the exact working times, but as demonstrated above, they do so without providing any concrete guidance that can be followed by the parties.¹¹⁸ The need for concrete guidance in this regard seems to be especially important since being constantly online has become the default behaviour for most people,¹¹⁹ and the habit of conducting tasks simultaneously or outside of fixed schedules has become common in today's world.¹²⁰

This habit applies not only to working time but also to many other aspects of life.¹²¹ The sociologist Ursula Huws, for example, provides “four snapshots” from the digital reality in which people are supposedly interacting with one another, and yet at the same time they are obsessively dealing with their cellphone for purposes that are not necessarily work-related.¹²² Modern youth also demonstrate how the need (and ability) to be constantly connected online or to conduct several activities simultaneously is present well beyond the scope of the labour field and has become an everyday norm.¹²³ Similar observations can be made regarding the increasing number of adults who suffer from attention deficit hyperactivity disorder because of new habits that they have acquired due to their extensive use of the internet for work and leisure purposes.¹²⁴ In other words, the digital age has generated new habits that are difficult to resist.¹²⁵ If we wish to encourage a change in working habits, we need to provide both employees and employers with concrete tools and guidance on how to do so.

¹¹⁷ See Dagnino, “The Right to Disconnect”, *supra* note 95 at 446.

¹¹⁸ See Chiuffo, *supra* note 99 at 13–14.

¹¹⁹ Research shows that the constant use of smart devices is becoming more common among adults and teenagers: see Shannon Greenwood, Andrew Perrin & Maeve Duggan, “Social Media Update 2016” (11 November 2016) at 3, n 1, online (pdf): *Pew Research Center* <www.pewinternet.org> [perma.cc/KS5H-G3N6] (indicating that 86 per cent of Americans are currently internet users).

¹²⁰ See Part IIB, “Sporadic Working Hours and Being Constantly Online for Work”, *above*.

¹²¹ See e.g. the discussion in Sonia Livingstone, *Children and the Internet: Great Expectations, Challenging Realities* (Cambridge, UK: Polity Press, 2009) at 40.

¹²² See Ursula Huws, *Labor in the Global Digital Economy: The Cybertariat Comes of Age* (New York: Monthly Review Press, 2014) at 12–14 [Huws, *Global Digital Economy*].

¹²³ See Livingstone, *supra* note 121 at 18–23, 48–53.

¹²⁴ See e.g. Hee Jeong Yoo et al, “Attention Deficit Hyperactivity Symptoms and Internet Addiction” (2004) 58:5 *Psychiatry & Clinical Neurosciences* 487.

¹²⁵ See Huws, *Global Digital Economy*, *supra* note 122 at 12–14; Lawrence Lessig, *Code, Version 2.0* (New York: Basic Books, 2006) at 1–6.

B. Avoiding Time Calculation and Shifting to Other Forms of Payment

Another way to circumvent the difficulty of working time in the digital reality is to avoid the time-based payment model and shift to payment based on other factors, such as performance or results. The idea of avoiding time calculation originally stems from the field of management.¹²⁶ This model of payment is not new; however, the development of ICT and the ability to conduct telework remotely have generated new theories of management that call for the transition from time-based payment to output-based payment in order to adjust to the modern technological workplace and to benefit both the employee and the employer.¹²⁷

One of the leading theories in this context, taken from human resource management, is New Ways of Working (NWW), which has become very popular among companies in recent years¹²⁸ in countries including the United States,¹²⁹ Australia,¹³⁰ the Netherlands,¹³¹ Slovakia,¹³²

¹²⁶ For further elaboration on the sources and meaning of this management approach, see Edward P Lazear, “Performance Pay and Productivity” (2000) 90:5 *American Economic Rev* 1346.

¹²⁷ For the Quebec law that enables payment based on production, see *Labour Standards*, *supra* note 9, s 89(1). For new theories of management that call for a transition to output-based payment, see e.g. Lazear, *supra* note 126. See also Pascale Peters et al, “Enjoying New Ways to Work: An HRM-Process Approach to Study Flow” (2014) 53:2 *Human Resource Management* 271 at 272 [Peters et al, “Enjoying New Ways to Work”].

¹²⁸ See Lieke L ten Brummelhuis et al, “Do New Ways of Working Foster Work Engagement?” (2012) 24:1 *Psicothema* 113 at 113; Merle M Blok et al, “New Ways of Working: Does Flexibility in Time and Location of Work Change Work Behavior and Affect Business Outcomes?” (2012) 41 *Work* 2605 at 2605; Harri Laihonen et al, “Measuring the Productivity Impacts of New Ways of Working” (2012) 10:2 *J Facilities Management* 102 at 102–03.

¹²⁹ Further discussion of ROWE in the United States will be found in the text accompanying notes 138-42, *below*.

¹³⁰ See Karen Handley, Susan McGrath-Champ & Philomena Leung, “A New Way of Working: Flexibility and Work-Life Balance in the Accounting Profession in Australia” in Yvette Blount & Marianne Gloet, eds, *Anywhere Working and the New Era of Telecommuting* (Hershey, Pa: IGI Global, 2017) 113.

¹³¹ See Jan De Leede & Jorien Kraijenbrink, “The Mediating Role of Trust and Social Cohesion in the Effects of New Ways of Working: A Dutch Case Study” in Tanya Bondarouk & Miguel R Olivas-Luján, eds, *Human Resource Management, Social Innovation and Technology* (Bingley, UK: Emerald Group, 2014) 3; Vivienne Laurence Medik & Christoph Johann Stettina, “Towards Responsible Workplace Innovation: The Rise of NWW in Public Knowledge Organizations and Their Impact on Governance” (Paper delivered at the IEEE International Conference on Engineering, Technology, and Innovation, Bergamo, June 2014) [unpublished].

¹³² See Denisa Fedáková & Lucia Ištoňová, “Slovak IT-Employees and New Ways of Working: Impact on Work-Family Borders and Work-Family Balance” (2017) 61:1 *Československá Psychologie* 68.

and others.¹³³ NWW is defined as a workforce philosophy in which the employee is free to choose when, where, and for how long to work, since there is no fixed schedule.¹³⁴ The employee can do so using various new media technologies that enable easy communication with colleagues, supervisors, and clients.¹³⁵ In other words, employees are allowed to conduct telework when and where they wish. Instead of estimating payment based on working time, what is actually important is the employee's outputs.¹³⁶

A similar approach to NWW that originated at Best Buy's headquarters in Minneapolis and spread to other companies around the world, including in Canada,¹³⁷ is the Results-Only Work Environment (ROWE).¹³⁸ ROWE is a corporate-led initiative,¹³⁹ and its main task is to "move employees and supervisors from existing, implicit contracts about the expected amount of time at work toward a more explicit contract based on what is required by the job."¹⁴⁰ The employee does not need to be present at the workplace or work during specific periods of time. The only requirement is that the desirable outcomes be achieved by a concrete date,¹⁴¹ or as ROWE's website formerly described it, "Nobody talks about how many hours they work ...

¹³³ For further elaboration on NWW in the context of labour law, see Pascale Peters et al, "Exploring the 'Boundary Control Paradox' and How to Cope with It: A Social Theoretical Perspective on Managing Work-Life Boundaries and Work-Life Balance in the Late Modern Workplace" in De Groof, *supra* note 45, 261 at 261–62 [Peters et al, "Exploring the 'Boundary Control Paradox'"]. See also Frank Hendrickx, "Regulating New Ways of Working: From the New 'Wow' to the New 'How'" (2018) 9:2 *European Labour LJ* 195 at 201–02 (for a different theoretical and practical angle of NWW).

¹³⁴ See Peters et al, "Exploring the 'Boundary Control Paradox'", *supra* note 133 at 262; Evangelia Demerouti et al, "New Ways of Working: Impact on Working Conditions, Work-Family Balance, and Well-Being" in Christian Korunka & Peter Hoonakker, eds, *The Impact of ICT on Quality of Working Life* (Dordrecht: Springer, 2014) 123 at 123; ten Brummelhuis et al, *supra* note 128 at 113.

¹³⁵ See ten Brummelhuis et al, *supra* note 128 at 113.

¹³⁶ See e.g. Lazear, *supra* note 126. See generally Peters et al, "Enjoying New Ways to Work", *supra* note 127; ten Brummelhuis et al, *supra* note 128.

¹³⁷ See e.g. Stephanie Zolis, "The Results-Only Work Environment: Will It Work for You?", *Canadian Living* (10 June 2014), online: <www.canadianliving.com> [perma.cc/C2JN-MDNN]; Tamsin McMahon, "The War on Work-Life Balance", *Maclean's* (7 November 2013), online: <www.macleans.ca> [perma.cc/3LVQ-PNP4].

¹³⁸ See Phyllis Moen, Erin Kelly & Kelly Chermack, "Learning from a Natural Experiment: Studying a Corporate Work-Time Policy Initiative" in Ann C Crouter & Alan Booth, eds, *Work-Life Policies* (Washington: Urban Institute Press, 2009) 97 at 103, 106.

¹³⁹ See "Results-Only Work Environment" (last visited 5 June 2020), online: *GoROWE* <www.gorowe.com> [perma.cc/Z6QQ-8BQM].

¹⁴⁰ Moen, Kelly & Chermack, *supra* note 138 at 103.

¹⁴¹ See Katherine S Drake & Amy K Brown, "Making the Business Case for Work-Life Integration" in De Groof, *supra* note 45, 73 at 98–100; Cali Ressler & Jody Thompson, *Why Managing Sucks and How to Fix It* (Hoboken: John Wiley & Sons, 2013) at 6.

The focus is on the work being accomplished. ... No results? No job. That's the new employee agreement."¹⁴²

Over the years, several studies have evaluated the ROWE and NWW initiatives and reached contradictory conclusions regarding their outcomes. As a comprehensive international report clarifies, when dealing with the general idea of work from a distance, “[b]oth positive and negative effects ... on work-life balance are reported by nearly all of the national studies, sometimes even by the same individuals.”¹⁴³

Some research has found the results of ROWE and NWW initiatives to be positive, and has demonstrated that in the case of structured but flexible work arrangements, detachment from a clear working time and space framework can lead to greater autonomy, enhanced well-being, and a better work-life balance for the employee.¹⁴⁴ The ROWE approach can also reduce employee turnover, although it cannot moderate the influence of other variables (such as gender, age, and parenthood).¹⁴⁵ Both ROWE and NWW appear as an “extremist” version of telework, which is also associated with preferable schedule arrangements for the employee.¹⁴⁶ In this way, even

¹⁴² “The New Workplace Standards” (20 December 2016), online: *GoROWE* <www.gorowe.com> [perma.cc/8K2U-UXSQ]. See also Cali Ressler & Jody Thompson, *Why Work Sucks and How to Fix It: The Results-Only Revolution* (New York: Portfolio/Penguin, 2011) at 1–8.

¹⁴³ Eurofound & ILO, *Working Anytime, Anywhere*, *supra* note 36 at 29.

¹⁴⁴ See Phyllis Moen et al, “Changing Work, Changing Health: Can Real Work-Time Flexibility Promote Health Behaviors and Well-Being?” (2011) 52:4 *J Health & Soc Behavior* 404 at 423; Rachele Hill et al, “Relieving the Time Squeeze? Effects of a White-Collar Workplace Change on Parents” (2013) 75:4 *J Marriage & Family* 1014 at 1023–25; Steffen Viete & Daniel Erdsiek, “Trust-Based Work Time and the Productivity Effects of Mobile Information Technologies in the Workplace” (2018) ZEW Discussion Paper No 18-013, online (pdf): <www.econstor.eu> [perma.cc/4MDM-37Z3] (analyzing the connection between Results-Only Work Environment efforts in Germany, mobile ICT, and autonomy).

¹⁴⁵ For an example of how ROWE can reduce employee turnover, see e.g. the case study of the company Best Buy in Moen, Kelly & Hill, *supra* note 44 at 86; Leslie A Perlow & Erin L Kelly, “Toward a Model of Work Redesign for Better Work and Better Life” (2014) 41:1 *Work & Occupations* 111 at 118. For the interaction of ROWE and other variables, see Moen, Kelly & Hill, *supra* note 44 at 82. As the authors described in the “Results” part of their study,

We then tested interactions between participation in ROWE and independent variables, to examine the hypothesis that ROWE would moderate the influence of other variables on turnover. We find no statistically significant effect of ROWE moderating age, gender, or presence/number of children, whether included separately or as a gender/life stage variable (estimated in separate models not shown). Neither did ROWE moderate job-level effects (*ibid*).

¹⁴⁶ For more on the benefits of flexible working hours, see the text accompanying notes 41–45.

more than with regular formal telework, ROWE and NWW offer the employee flexibility, freedom of movement, and autonomy in the simplest way, without any sort of time restrictions or calculations.

However, other research has demonstrated that detaching work from any time setting, as ROWE and NWW do, also has problematic outcomes for the employee. First, an extremely flexible work schedule may actually *disturb* work-life balance and be less effective for the employee, since the employee is often de facto controlled by the employer in accordance with the employer's preferences.¹⁴⁷ Moreover, along with its positive outcomes, many of the negative outcomes of telework elaborated so far are also present in ROWE and NWW, and perhaps even more strongly.¹⁴⁸ For instance, some employees feel grateful for the opportunity to work in a flexible arrangement and thus work more to satisfy their manager or colleagues.¹⁴⁹ Employees without any clear time setting, limitations, or clear guidance may also suffer from significant workloads, task complexity, or a fear of missing out, leading them to work more.¹⁵⁰ Similarly, studies have shown that NWW leads to an overload of work, especially due to the constant use of emails; this involves pressure to constantly reply to emails and the many unanticipated tasks that they bring.¹⁵¹ As a result, ROWE and NWW initiatives may also damage an employee's mental and physical health and dignity.¹⁵² This outcome is possible since the shift from hours to outcomes forces the employee to work until tasks are accomplished, even if this means that the employee has to work excessive hours each day and during the weekends. This work could be done in a way that negatively influences the employee's health.¹⁵³

¹⁴⁷ See Part IIB2, "The Implications of Time Porosity for the Notion of Working Time", *above*, for more on this topic. See also Crosbie & Moore, *supra* note 36 at 225–29; Genin, "The Third Shift", *supra* note 45 at 112.

¹⁴⁸ See Part IIA2, "The Implications of Formal Telework for the Notion of Working Time", *above*.

¹⁴⁹ See Gregg, *supra* note 43 at 3, 53–54.

¹⁵⁰ See Nicola Stacey et al, "Key Trends and Drivers of Change in Information and Communication Technologies and Work Location: Foresight on New and Emerging Risks in OSH" (15 May 2017) at 15, online (pdf): *EU-OSHA* <osha.europa.eu> [perma.cc/3RVH-8GGL].

¹⁵¹ See Demerouti et al, *supra* note 134 at 126–27; ten Brummelhuis et al, *supra* note 128 at 115.

¹⁵² See Demerouti et al, *supra* note 134 at 126–27; ten Brummelhuis et al, *supra* note 128 at 115. On the mental consequences, see Hylco H Nijp, "Worktime Control and New Ways of Working: A Work Psychological Perspective" (2016) at 10, 46, 120, online (pdf): *Behavioural Science Institute* <www.publicatie-online.nl> [perma.cc/9FEV-YLNZ]. See also Pascale Peters, Laura den Dulk & Tanja van der Lippe, "The Effects of Time-Spatial Flexibility and New Working Conditions on Employees' Work-Life Balance: The Dutch Case" (2009) 12:3 *Community, Work & Family* 279 at 292–93.

¹⁵³ See Peters, den Dulk & van der Lippe, *supra* note 152 at 292–93.

In this way, in the name of the flexibility and autonomy enabled by ICT, the working day never really ends. It is extended to evenings, weekends, and vacations.¹⁵⁴ In the context of management theory, these results are not surprising. What NWW and ROWE actually do is shift overtime costs from the employer to the employee.¹⁵⁵ The employee enjoys more autonomy and flexibility, but must in return sacrifice the protection of private time, and in particular, protection of their health, well-being, and dignity.

IV. Turning to a Third Form of Regulation

A. *How Should We Devise Regulation in the Digital Reality?*

As demonstrated, the challenges with working time in the digital reality have led to two different responses: enabling an employee's right to disconnect to protect a distinct concept of working time or avoiding the notion of working time altogether to promote other values. Technology is at the basis of these two responses, whether as a factor that must be controlled and limited due to its problematic implications for employees, or as a positive factor that should be used for the benefit of all parties. However, technology by itself is not necessarily good or bad.¹⁵⁶ Technology can be used to increase the benefits to the employer at the expense of the employee's rights,¹⁵⁷ but it can also be used to promote labour rights.¹⁵⁸

Thus, I suggest resolving the working time dilemma by using the same technological infrastructure that allegedly created this dilemma in the first place—using the tools of ICT. In other words, in order to ensure effective

¹⁵⁴ See Demerouti et al, *supra* note 134 at 135. See also James E Katz & Mark A Aakhus, "Conclusion: Making Meaning of Mobiles: A Theory of *Apparatgeist*" in James E Katz & Mark A Aakhus, eds, *Perpetual Contact: Mobile Communication, Private Talk, Public Performance* (Cambridge, UK: Cambridge University Press, 2002) 301.

¹⁵⁵ See generally Charles C Holt, Franco Modigliani & Herbert A Simon, "A Linear Decision Rule for Production and Employment Scheduling" (1955) 2:1 *Management Science* 1 at 14–17 (for further economic elaboration of overtime costs).

¹⁵⁶ See AW (Tony) Bates, *Technology, E-learning and Distance Education*, 2nd ed (London, UK: Routledge, 2005) at 2.

¹⁵⁷ See e.g. Wajcman, *supra* note 77 at 89–90; Huws, *The Making of a Cybertariat*, *supra* note 78 at 166–67; Gregg, *supra* note 43 at 2. See also Charlotte S Alexander & Elizabeth Tippett, "The Hacking of Employment Law" (2017) 82:4 *Mo L Rev* 973 at 974–76; Brishen Rogers, "Employment Rights in the Platform Economy: Getting Back to Basics" (2016) 10 *Harvard L & Policy Rev* 479 at 489–93.

¹⁵⁸ On regulation of rights through the structure of the internet, see Lessig, *supra* note 125 at 81–82. See also Molly Cohen & Arun Sundararajan, "Self-Regulation and Innovation in the Peer-to-Peer Sharing Economy" (2015) 82 *U Chicago L Rev Dialogue* 116 (for another concrete example on how we should use the internet platform as a means of regulation); Maayan Perel & Niva Elkin-Koren, "Black Box Tinkering: Beyond Disclosure in Algorithmic Enforcement" (2017) 69:1 *Fla L Rev* 181.

regulation in the digital reality, the legal framework should *use* the structure of the internet to regulate the working time dilemma, rather than seeking to limit its reach.¹⁵⁹ To achieve this goal, ICT should be used in the model as a tool to both protect traditional labour rights and enable the new opportunities afforded by the digital reality.

Additionally, regulation should include both mandatory and default arrangements.¹⁶⁰ It should combine technological tools with human elements, as embodied in employee representatives. The mandatory arrangements should be legally binding so that their content cannot be changed. The default elements are optional and can be changed, although only after negotiation and agreement between the employer and the employee representatives. Due to the inherent power dynamic in the workplace, especially in cases lacking formal representation of employees (i.e., in a non-unionized workplace), the default elements in the mechanism should be written from a pro-employee perspective.¹⁶¹ They should be modifiable only if there is a detailed policy adapted to the workplace that was drafted and agreed upon in collaboration with employee representatives.

The mix of these two forms of regulation is not new.¹⁶² First, as demonstrated earlier, the European models of the right to disconnect are mainly based on collective bargaining and are a matter of negotiation between the employer and the employee representatives, but not all of them have additional binding rules. A more concrete mix of mandatory and default elements was proposed by an ILO report that argued that the question of working time must be regulated by “collective bargaining, together with legislative provisions.”¹⁶³ However, as with the European models of the right to disconnect, it is unclear how this combination should be implemented, according to the ILO. A more detailed model for this sort of mixed proposition was made in the broader context of due process in the workplace: Mundlak argued that on some issues, it is useful to turn to “derogation arrangements,” through which the employer and the formal employee representatives can derogate from some of the statutory standards based on negotiation and mutual agreement.¹⁶⁴

¹⁵⁹ See Lessig, *supra* note 125 at 20.

¹⁶⁰ See Guy Mundlak, “Information-Forcing and Cooperation-Inducing Rules: Rethinking the Building Blocks of Labour Law” in Gerrit De Geest, Jacques Siegers & Roger Van den Bergh, eds, *Law and Economics and the Labour Market* (Cheltenham: Edward Elgar, 1999) 55 at 77–83.

¹⁶¹ Cf. Mundlak, *supra* note 160 (on possible alternative frameworks for mechanisms of regulation in workplaces not governed by collective agreements).

¹⁶² See *ibid* at 78 (referring to Germany, Italy, and France).

¹⁶³ ILO, *General Survey*, *supra* note 8 at para 761.

¹⁶⁴ See Mundlak, *supra* note 160 at 77–78.

The mandatory sections that I suggest include basic rules intended to ensure the protection of working time: (almost) every working minute is counted and factored into the employee's salary and social benefits. Another mandatory rule is that the counting of hours must be transparent and accessible to all relevant parties and can also be used in order to ensure the protection of leisure time. The default arrangements concern the exact value of the different working time units. This entire system is based on and organized by ICT.

The details of my proposed regulations are set out below. As I hope to demonstrate, the proposed model has the potential to provide solutions to some of the deficiencies associated with the right to disconnect and the ROWE and NWW initiatives. The mandatory elements ensure legal protections, through which employees can enjoy the protection of working time with its justifications and purposes. At the same time, the default elements provide the necessary balance with the benefits that ICT has brought to the workplace, such as flexibility and autonomy. The default elements thus enable parties to flexibly adjust the model to each employee and employer in accordance with their specific needs and preferences,¹⁶⁵ without sacrificing the employee's right to be compensated for their actual working hours or their rights to dignity, health, and well-being. Moreover, to cope with the ambiguity of the right to disconnect, the model includes concrete rules that will enable parties to implement this right in a clear way and prevent interpretations that render it meaningless.

B. The Role of the Employee Representatives

Before elaborating on the concrete mandatory and default elements of the proposed model, it is important to clarify the crucial role that employee representatives will play in it. Employee representatives have the ability to work with the employer to adapt the default rules to the specific workplace and its positions. They can ensure that the voices and needs of the employees are an integral part of the process. The employee representatives can also ensure compliance with the agreements and legislated requirements.

In unionized workplaces, it is easy to define the employee representatives, as they are embodied in the trade union.¹⁶⁶ The involvement of formal

¹⁶⁵ Something that the current French model of the right to disconnect does not enable (see Lerouge, *supra* note 88 at 224).

¹⁶⁶ See David Weil, "Individual Rights and Collective Agents: The Role of Old and New Workplace Institutions in the Regulation of Labor Markets" in Richard B Freeman, Joni Hersch & Lawrence Mishel, eds, *Emerging Labor Market Institutions for the Twenty-First Century* (Chicago: University of Chicago Press, 2005) 13 at 14; Davidov, *Purposive Approach to Labour Law*, *supra* note 25 at 238. See generally Sara Slinn, "An Analysis

unions in the organization and regulation of telework already takes place in some countries.¹⁶⁷ In Canada, unions were an integral part of the governmental consultation on telework (and other required changes to employment standards), and they are supposed to be an integral part of any planning group regarding implementing telework in a workplace.¹⁶⁸ In many other countries, unions have taken an active role in initiating and enabling telework in the workplace.¹⁶⁹ However, in most countries, including Canada, trade unions do not have any official role in solving the problem of time porosity.¹⁷⁰

Moreover, with shrinking trade-union density¹⁷¹ and the difficulties that unions currently face in Canada,¹⁷² most workplaces do not have a company-level union and most of the employees are not formally represented by any union.¹⁷³ According to official statistics, around 30 per cent of Canadian employees were represented by trade unions in 2015.¹⁷⁴ Re-

of the Effects on Parties' Unionization Decisions of the Choice of Union Representation Procedure: The Strategic Dynamic Certification Model" (2005) 43:4 Osgoode Hall LJ 407.

¹⁶⁷ See Eurofound & ILO, *Working Anytime, Anywhere*, *supra* note 36 at 48.

¹⁶⁸ See Employment and Social Development Canada, *Flexible Work Arrangements: What Was Heard* (Ottawa: ESDC, September 2016) at 1–2, online (pdf): <www.canada.ca> [perma.cc/4RZM-VMLR]; Transport Canada, *supra* note 42 (regarding the requirement to involve unions in the implementation process in every workplace).

¹⁶⁹ See Eurofound & ILO, *Working Anytime, Anywhere*, *supra* note 36 at 48–49 (regarding the UK, Italy, Spain, Finland, Belgium, and the Netherlands). See also Amanda Reilly & Annick Masselot, "Precarious Work and Work-Family Reconciliation: A Critical Evaluation of New Zealand's Regulatory Framework" in De Groof, *supra* note 45, 285 at 285, 293–95 (on New Zealand legislation that gives employees a statutory right to request flexible work arrangements).

¹⁷⁰ Other than in France, Spain, and Germany (see Part IIIA, "The Right to Disconnect", *above*).

¹⁷¹ See Benjamin I Sachs, "Law, Organizing, and Status Quo Vulnerability" (2017) 96:2 Tex L Rev 351 at 352. See generally Davidov, *Purposive Approach to Labour Law*, *supra* note 25 at 226–27 (for an explanation of the difficulties of unionization in the American context).

¹⁷² See e.g. Brian Langille, "The Freedom of Association Mess: How We Got into It and How We Can Get Out of It" (2009) 54:1 McGill LJ 177; Brian Langille & Benjamin Oliphant, "The Legal Structure of Freedom of Association" (2014) 40:1 Queen's LJ 249; David J Doorey, "Graduated Freedom of Association: Worker Voice Beyond the Wagner Model" (2013) 38:2 Queen's LJ 511; Sara Slinn, "No Right (to Organize) Without a Remedy: Evidence and Consequences of the Failure to Provide Compensatory Remedies for Unfair Labour Practices in British Columbia" (2008) 53:4 McGill LJ 687 at 690–91.

¹⁷³ See Davidov, *Purposive Approach to Labour Law*, *supra* note 25 at 238; Cynthia Estlund, "Rebuilding the Law of the Workplace in an Era of Self-Regulation" (2005) 105:2 Colum L Rev 319 at 323 [Estlund, "Rebuilding the Law of the Workplace"].

¹⁷⁴ See Employment and Social Development Canada, *Labour Organizations in Canada 2015* (Ottawa: ESDC, 2016) at 3, online (pdf): <www.canada.ca> [perma.cc/Q2KQ-L68S]. See also OECD Statistics, *Trade Union* (22 January 2020), online: OECD <stats.oecd.org> [perma.cc/W5M7-9L9T] [OECD, *Trade Union*].

search by the OECD determined similar figures for 2017, with approximately 28 per cent of employees represented by trade unions in Canada.¹⁷⁵ These numbers are not high, but they clarify that around a third of Canadian employees have formal representation. The degree of unionization in France and Spain, where employees have a formal right to disconnect that depends on employee representatives, is even lower. In 2015, around 15 per cent of Spanish employees were represented by a formal trade union.¹⁷⁶ In France, only around 9 per cent of employees belonged to a union for the same year.¹⁷⁷

For cases in which there is no formal body to represent the employees in the workplace, what should the solution be? In these cases, other forms of employee representation are needed to ensure that employees are an integral part of the negotiation process.¹⁷⁸ One potential way to ensure this is through workplace health and safety committees or representatives. EU research has found that the question of working time and work-life balance is associated with occupational health and well-being.¹⁷⁹ Similarly, in the American context, Secunda argued that the occupational health and safety administration can resolve issues related to employee disconnection from workplace communications due to their explicit influence on the employees' health and well-being.¹⁸⁰ Following this trend, occupational health and

¹⁷⁵ See OECD, *OECD Employment Outlook 2019: The Future of Work* (2019) at 225, online (pdf): *OECD* <www.oecd-ilibrary.org> [perma.cc/JY3Q-93UQ].

¹⁷⁶ See OECD, *Trade Union*, *supra* note 174.

¹⁷⁷ See *ibid.*

¹⁷⁸ On alternative forms of organization, see e.g. Arthurs' proposal that in non-unionized workplaces a new "Workplace Consultative Committee" would be required in Canada: Federal Labour Standards Review, *Fairness at Work: Federal Labour Standards for the 21st Century*, by Harry W Arthurs (Gatineau: Human Resources and Skills Development Canada, 2006) at 131–33. See also the various models of employee representation, particularly the hybrid model, in Estlund, "Rebuilding the Law of the Workplace", *supra* note 173 at 377–402. See also Cynthia Estlund, *Regoverning the Workplace: From Self-Regulation to Co-Regulation* (New Haven: Yale University Press, 2010) at 170–212. For the importance of employees' collective action and other forms of organization, see Catherine L Fisk, "Reimagining Collective Rights in the Workplace" (2014) 4:2 UC Irvine L Rev 523. For further optional roles for trade unions, see Kate Andrias, "The New Labor Law" (2016) 126:2 Yale LJ 2 at 97–99; Brishen Rogers, "Three Concepts of Workplace Freedom of Association" (2016) 37:2 BJELL 177 at 211–21.

¹⁷⁹ See Eurofound & ILO, *Working Anytime, Anywhere*, *supra* note 36 at 33. See also Jeffrey Saunders, "The Fourth Industrial Revolution and Social Innovation in the Work Place" (2019) at 5, online (pdf): *European Agency for Safety and Health at Work* <osha.europa.eu> [perma.cc/YD9X-G62S].

¹⁸⁰ Secunda relies mostly on section 5(a)(1) of the *Occupational Safety and Health Act*, which requires the employer to provide employees a workplace "free from recognized hazards that are causing or are likely to cause death or serious physical harm" (29 USC § 654(a)(1) (1970), cited in Secunda, *supra* note 112 at 6). Later on, he explains that this

safety committees in Canada can regulate the issue of remote work and employee disconnection for cases in which there is no formal trade union in the workplace.¹⁸¹

This seems to be a satisfactory solution, since unlike trade unions, many workplaces in Canada must have an occupational health and safety committee or representatives. According to the *Canada Labour Code*, every workplace under federal jurisdiction with at least twenty employees must establish a workplace health and safety committee.¹⁸² At the provincial level, there are similar requirements for having health and safety committees for workplaces with more than twenty employees; however, provincial requirements may not be legally binding, and the existence of health and safety committees may depend on requests from employees or the minister of labour.¹⁸³ At the federal level, the members of the committee are appointed by the employer,¹⁸⁴ while at the provincial level, there are often mandatory joint committees of workers and managers.¹⁸⁵ Thus, following Secunda's proposal, for cases in which there is no formal trade union, one possible way to ensure employee representation is through joint health and safety committees.

Finally, if there are no independent and organized representatives for the employees in one form or another, the employer will not be able to modify the default arrangement and must comply with it. Thus, the employer

rule should be interpreted in a way that offers the employee a genuine right to disconnect. However, as Secunda himself clarifies, this kind of interpretation has not yet been implemented (*supra* note 112 at 5–6, 15–20, 32–38).

¹⁸¹ For instance, by 2002, most of the occupational health and safety laws in Quebec already applied to formal teleworkers: see Sylvie Montreuil & Katherine Lippel, "Telework and Occupational Health: A Quebec Empirical Study and Regulatory Implications" (2003) 41:4 *Safety Science* 339 at 349–52. Note that this issue is still debatable in Canada: see Canadian Centre for Occupational Health and Safety, "Telework/Telecommuting", *supra* note 42.

¹⁸² RSC 1985, c L-2, s 135(1). Note that workplaces with fewer than twenty employees should have a health and safety representative (see *ibid*, s 136(1)).

¹⁸³ See e.g. *Act respecting occupational health and safety*, CQLR c S-2.1, ss 68–69 in Quebec. In Ontario, the law is stricter and clarifies that "[a] joint health and safety committee is required, (a) at a workplace at which twenty or more workers are regularly employed". The law also enables the minister of labour to demand the establishment of a committee in a certain workplace: see *Occupational Health and Safety Act*, RSO 1990, c O.1, s 9(2)(a), 9(3).

¹⁸⁴ See *Canada Labour Code*, *supra* note 182, s 135(1).

¹⁸⁵ See Elaine Bernard, "Canada: Joint Committees on Occupational Health and Safety" in Joel Rogers & Wolfgang Streeck, eds, *Works Councils: Consultation, Representation, and Cooperation in Industrial Relations* (Chicago: University of Chicago Press, 1995) 351 at 351. In Quebec, for instance, "[a]t least one-half of the members of a committee shall represent the workers": see *Act respecting occupational health and safety*, *supra* note 183, s 71. In a similar manner, the rules of Ontario also demand a joint health and safety committee that includes employee representatives: see *Occupational Health and Safety Act*, *supra* note 183, ss 9(2), 9(7), 9(8).

will have an incentive to enable formal and independent representation of the employees, whether through labour unions or otherwise, which can ensure that the employees' voices are an integral part of the negotiation process.

C. The Proposed Model

1. Everything Counts, Everything Is Transparent

At the heart of the proposed model's mandatory elements lies the employer's obligation to count all actual working time units. The first obstacle to the notion of working time in the digital age is the fact that working time is also spent outside of the official workplace and is often not registered in any formal system.¹⁸⁶ As a result, many working hours are not acknowledged or counted into the employee's formal working time.¹⁸⁷ The simplest solution to these unseen and unpaid working hours is to have a rule that orders them to be automatically counted using ICT.

Counting the exact hours that the employee is working is not a new concept. Even before the emergence of ICT, employers have tracked the exact time that employees work by using, for instance, a time clock that employees must sign when entering and leaving the office.¹⁸⁸ The digital reality has not only changed the time and place of work, but has also dramatically increased the ability to track the exact hours during which the employee is working.¹⁸⁹ From a technological perspective, it seems that because telework is by definition based on ICT, the hours during which the employee is conducting telework can be automatically counted using ICT.¹⁹⁰ And indeed, there are various programs today that can automatically count and manage the employee's time.¹⁹¹

Furthermore, an ILO report noted that some countries have already adopted partial arrangements, mandatory or optional, to enable the electronic recording of working schedules conducted outside the workplace and

¹⁸⁶ See Eurofound & ILO, *Working Anytime, Anywhere*, *supra* note 36 at 21–23.

¹⁸⁷ A special report by the ILO on this issue found that one of the main factors in non-compliance with working time is the frequent absence of working time records: see ILO, *General Survey*, *supra* note 8 at paras 816, 854.

¹⁸⁸ For new and old ways of supervising employees in the digital reality, see generally Tammy Katsabian, "Employees' Privacy in the Internet Age: Towards a New Procedural Approach" (2019) 40:2 BJELL at 212–16.

¹⁸⁹ See *ibid*; Ifeoma Ajunwa, Kate Crawford & Jason Schultz, "Limitless Worker Surveillance" (2017) 105:3 Cal L Rev 735 at 738.

¹⁹⁰ See Cohen & Sundararajan, *supra* note 158 at 119 (arguing that online platforms can and should become a solution to the problems their own technologies have produced).

¹⁹¹ See Wajcman, *supra* note 77 at 165. *Cf* Alexander & Tippett, *supra* note 157 (many of these tools are used in a manipulative manner to decrease the employee's paid working time or enable a digital "wage theft" at 998).

have emphasized the importance of these arrangements.¹⁹² The European Court of Justice has also recently clarified that to ensure the protection of the EU Working Time Directive, EU member states must require employers to implement a working time calculation system that can objectively count all of the actual working time of employees.¹⁹³ These suggestions for arrangements must be made obligatory in Canada to fulfill the basic premise that every working minute is automatically counted. Currently, some Canadian provinces have acknowledged the importance of this obligation. In Ontario, for instance, there is a rule that requires the employer to count all of the actual working hours of the employee.¹⁹⁴ In Quebec, the employer is required to provide the employee with a pay sheet that contains information regarding working hours, including overtime work.¹⁹⁵ However, the law in Quebec does not indicate the exact way in which the employer should calculate these working hours. Unlike the current labour laws, the proposed obligation demands that every workplace count all of the actual working hours, including outside the office, by using ICT.

The additional hours spent working remotely can be added to the formally recognized working hours in the office. When the work does not have any digital basis (e.g., reading a paper offline at home) or the system is unable to identify and calculate the actual working time for any reason, employees can manually add the extra hours with an explanation of what exactly they were doing and how long each task took. With obligatory automatic calculation of actual working time, the employee, the employee representatives, and the employer should be able to view how many hours the employee has worked in every setting.¹⁹⁶ The employee and the employer

¹⁹² See ILO, *General Survey*, *supra* note 8 at 297–98 (concerning working time). Similarly, an ETUC survey showed that many respondents emphasize the importance of clear rules on how to count working time at home or away from the office (see Voss & Riede, *supra* note 4 at 30).

¹⁹³ See *Federación de Servicios de Comisiones Obreras (CCOO) v Deutsche Bank SAE*, C-55/18, [2019] ECR I-1 at I-12.

¹⁹⁴ See *Employment Act*, *supra* note 9, s 15(1). This rule also applies to homeworkers (*ibid*).

¹⁹⁵ See *Labour Standards*, *supra* note 9, ss 46(5)–(6).

¹⁹⁶ The principle of transparency is new neither in the labour field nor in the digital age. Scholars have previously demonstrated in diverse contexts why it is important to maintain the procedural principle of data transparency to the employee: see e.g. Cynthia Estlund, “Just the Facts: The Case for Workplace Transparency” (2011) 63:2 *Stan L Rev* 351. This is especially true in cases where it is easy to collect the data thanks to technology: see Cherry & Poster, *supra* note 36 at 294, 302–03; Matthew T Bodie et al, “The Law and Policy of People Analytics” (2017) 88:4 *U Colo L Rev* 961 at 962–64; Cohen & Sundararajan, *supra* note 158 at 133. Data transparency is also important in the context of ranking workers in the sharing economy: see e.g. De Stefano, *supra* note 79 at 500; Bernd Waas et al, *Crowdwork: A Comparative Law Perspective* (Frankfurt: Bund-Verlag, 2017) at 59–63; Miriam A Cherry, “Virtual Work and Invisible Labor” in Marion G Crain, Winifred R Poster & Miriam A Cherry, eds, *Invisible Labor: Hidden Work in the Contemporary World* (Oakland: University of California Press, 2016) 71 at 82–84.

will consequently be able to recalculate the working schedule for the rest of the month.

Admittedly, this approach may have some problematic repercussions. First, the constant calculation of working hours may invade the employee's privacy. However, technology can be used not only to count the employee's total actual working hours, but also to protect the employee's right to privacy. Thus, the calculation of the remote working hours must be made only after receiving the employee's consent. In this way, the remote calculation will initially only be exposed to the person who conducts the work from a distance (i.e., the employee). In cases when the program identifies that the employee is conducting work outside of the workplace, during the employee's supposed leisure time, then the program can, for instance, send the employee a pop-up message, asking them whether they are conducting work and wish to calculate it as working time. If the employee's answer is positive, then the employer will have access to the specific content in accordance with privacy rules (as the employer does to professional content produced in the workplace during working hours).¹⁹⁷ To ensure that the employee is aware of this, each time the employee's answer is positive, the program will automatically, briefly, and clearly notify the employee of the meaning of their consent and of the exact content to which the employer will have access.

Second, some may argue that ICT enables employees to continue working during leisure time, but it also enables them to complete personal tasks during working time (e.g., private emails, Facebook, or personal administrative matters). The sociologist Judy Wajcman has argued in her comprehensive book on time in the modern age that we do not necessarily work more in the digital reality; rather, we may only *feel* as if we are working more because we do not have clear boundaries between work and leisure.¹⁹⁸ She has defined this phenomenon as being "pressed for time."¹⁹⁹ As a result, some employees may feel the need to fill the gap outside the office by continuing to work from home without clearly acknowledging it as working time.²⁰⁰ Counting all of this supposedly extra working time from home would impose an unjust economic burden on the employer or, worse, could

¹⁹⁷ For a detailed elaboration of the right to privacy in Canada, see Marta Otto, *The Right to Privacy in Employment: A Comparative Analysis* (Oxford: Hart, 2016) at 121–71.

¹⁹⁸ See Wajcman, *supra* note 77 at 4–5.

¹⁹⁹ *Ibid* at 4.

²⁰⁰ See *ibid* at 145. For more information on employees who conduct personal tasks during their working time at the office, see also Yuki Noguchi, "When It Comes to Productivity, Technology Can Hurt and Help", *NPR* (30 April 2013), online: <www.npr.org/perma.cc/76F2-HJNP>.

encourage the employer to abuse their supervisory prerogative and obsessively count every minute of non-work within the workplace, including short pauses to scratch or fidget or for bathroom breaks.²⁰¹

Nonetheless, as noted above, many studies have convincingly demonstrated that in the digital reality, technology compels people to work for longer hours and not just to blend leisure with work.²⁰² Moreover, even when employees blur the distinction between work and leisure without necessarily working any longer, many of their basic rights—for example, to enjoy break time and to enjoy weekends—are disturbed on a daily basis. The employer has the prerogative and the actual means to make sure that the employee is working during formal working time, so the solution of allowing work to be carried out during personal time to balance the use of professional time to conduct personal tasks cannot be justified.²⁰³

As for the fear of a niggling calculation and supervision of working time at the office, employers already seem to have the capability—and sometimes the incentive—to count every minute of the employee's work, and some may already do so.²⁰⁴ The possibility of this undesirable outcome is present in every solution that aims to supervise and restrict working time, including in the right to disconnect model. Yet, due to the problematic outcomes for employee rights in models without time restrictions, setting clear limitations on working time is still worthwhile. If there is a general problem of employers preventing employees from taking breaks for small personal tasks, the employee representatives, for instance, can be utilized to ensure that the employer uses their supervisory prerogative fairly and reasonably, without unnecessarily violating the employee's right to autonomy and privacy.

2. Estimating the Working Time

After gathering data on the number of hours an employee is working in practice, the next step in calculating the employee's accurate salary is supposedly quite easy. The salary of the employee should be equal to the number of actual working hours multiplied by payment per hour. However, in many positions, the salary paid is unrelated to how many working hours have been performed in practice. Furthermore, the final calculation includes regular working hours, extra working hours, and time porosity.

²⁰¹ For a radical example, see Ceylan Yeginsu, "If Workers Slack Off, the Wristband Will Know. (And Amazon Has a Patent for It.)", *The New York Times* (1 February 2018), online: <www.nytimes.com> [perma.cc/DU8K-DA38].

²⁰² See e.g. Huws, *Global Digital Economy*, *supra* note 122 at 76–77; Gregg, *supra* note 43 at 2; Crosbie & Moore, *supra* note 36.

²⁰³ See Ofek-Ghendler, *supra* note 25 at 19.

²⁰⁴ See Yeginsu, *supra* note 201; Katsabian, *supra* note 188 at 212–16.

Each of these time unit types correspond to a different rate of compensation.

In response to these difficulties, the second proposed obligatory rule is that the salary must be paid based on actual working hours. As described previously, the basic rule in Canadian provinces is payment per hour that meets or exceeds the minimum wage and a clear limit to the maximum working hours permissible per day or week.²⁰⁵ A corollary rule concerns the obligation to count all actual working hours of the employee.²⁰⁶ Thus, in principle, this second suggested obligatory rule is already part of Canadian legal norms. However, there are many workplaces in Canada today that pay salaries unrelated to the actual working hours of the employee, and there are many concrete rules that enable this kind of payment, along with deviation from the maximum permissible working hours per day or week, and exemptions from the obligation to record all actual working hours of an employee.²⁰⁷

The studies presented throughout this article on the wide scope of unpaid and undefined working hours lead to the conclusion that the concepts of payment-per-working hour and clear boundaries between work and leisure have become overlooked in today's world. This phenomenon has negative implications for employee rights.²⁰⁸ Thus, I suggest requiring the employer to calculate and pay for every minute of an employee's actual work.

The next step is to calculate the exact compensation for each type of working time unit. Here, it seems reasonable to apply a default arrangement, as there may be many differences between workplaces and positions in terms of the influence of telework on working time and rest time, so it

²⁰⁵ See e.g. *Employment Act*, *supra* note 9, ss 17, 23.1(1); *Labour Standards*, *supra* note 9, ss 52, 89(1).

²⁰⁶ See e.g. *Employment Act*, *supra* note 9, s 15(1).

²⁰⁷ Many employees are excluded from the minimum wage protection: see e.g. *Employment Act*, *supra* note 9, s 15(3); Ontario, Ministry of Labour, Training and Skills Development, "Hours of Work" (2019), online: *Government of Ontario* <www.ontario.ca> [perma.cc/D2WM-T2CS]; Ontario, "Mandatory Poster and Information Sheets for Employers" (2019), online: *Government of Ontario* <www.ontario.ca> [perma.cc/YQF7-YCHQ]. In Ontario, some industries and occupations have exceptions for working hours: see Ontario, Ministry of Labour, Training and Skills Development, "Industries and Jobs with Exemptions or Special Rules" (2019), online: *Government of Ontario* <www.ontario.ca> [perma.cc/LJ5M-SM6E]. In Quebec, there are also exceptions to the basic rule of payment based on hours and the maximum permissible working hours: see *Labour Standards*, *supra* note 9, ss 53, 54(4), 89.

²⁰⁸ For more on this topic, see the text accompanying notes 24–28.

would be problematic to impose the same strict rules on all the diverse forms of telework.²⁰⁹

The basic rule in this regard is that the employee is entitled to receive payment for each day of work, which should be similar in length to the regular working day as it is determined by employment standards legislation in the applicable province of Canada.²¹⁰ In addition, the employee is owed overtime payment for each extra working hour per day.²¹¹ Thus, the default rule should be overtime payment calculated on a daily basis.²¹² This default rule should also be applied in provinces in which the current basic rule is overtime payment on a weekly basis,²¹³ so that the employee or employee representatives will have a better starting point from which to negotiate. On this basis, compensation can take other forms more suitable to the concrete workplace following agreement with the employee representatives or the employee (or with the assistance of the occupational health and safety committee).²¹⁴ For example, other forms can include decreasing the number of working hours of the employee on the following day or allowing more vacation days equal to the actual extra working hours.²¹⁵ In cases of disagreement on the alternative form of compensation, the default becomes the mandatory rule.

²⁰⁹ On the importance of adjusting rules to the concrete workplace, see Mundlak, *supra* note 160 at 81; Einat Albin, *Sectoral Disadvantage: The Case of Workers in the British Hospitality Sector* (PhD Dissertation, University of Oxford, 2010) [unpublished] at 274; Katsabian, *supra* note 188 at 247–49. See also Dagnino’s main criticism on the French model regarding the right to disconnect, which follows “a ‘cut-and-paste’ approach” (Dagnino, “The Right to Disconnect”, *supra* note 95 at 446).

²¹⁰ See e.g. *Employment Act*, *supra* note 9, s 17(1) (which determines the eight hour maximum in a workday or forty-eight hours in a workweek in Ontario); *Labour Standards*, *supra* note 9, s 52 (which determines the forty working hour maximum per week in Quebec).

²¹¹ See e.g. *Employment Act*, *supra* note 9, s 22; *Labour Standards*, *supra* note 9, s 55.

²¹² The exact value of the overtime work can be decided together with the employee representatives, as there are many cases in which the overtime work is due to the employees’ desire to work less the following day. See e.g. the case of compressed working hours in ILO, *General Survey*, *supra* note 8 at paras 689–95.

²¹³ See e.g. in Quebec, in which *Labour Standards*, *supra* note 9, s 52 determines a maximum of forty working hours per week.

²¹⁴ Note that some of the current laws also enable other forms of compensation: see e.g. in Quebec, *Labour Standards*, *supra* note 9, s 55, which enables the employer to “replace the payment of overtime by paid leave equivalent to the overtime worked plus 50%.” At the federal level, the legislation allows the employee to work more in one day in order to work less the next day: see *Canada Labour Code*, *supra* note 182, ss 169–70.

²¹⁵ See *ibid.*

a. *Time Porosity*

Due to its unique nature, time porosity should be valued differently. The first hurdle before we can determine the value of time porosity is to identify and distinguish time porosity from the aforementioned “pure” working time units (whether basic or overtime). Unlike regular working hours, time porosity is ad hoc in its nature, usually short in duration, and interspersed throughout the leisure time of the employee, including weekends, holidays, and before and after regular working hours.²¹⁶ Thus, the program that automatically counts all working time units should be designed to identify and mark these short periods of work that last for concrete durations during the employee’s free time.²¹⁷ Here again, in cases when the program fails to identify time porosity, the employee should be able to manually add it to the final calculation.

Next, we need to determine the value of time porosity. On the one hand, it seems reasonable that time porosity should be valued similarly to regular working time. If the employee has conducted work for concrete periods during leisure time, there should be compensation for this time as there would be for any regular working time. Time porosity is not pure working time that is devoted solely to work,²¹⁸ but because the concrete minutes ultimately counted were devoted to work (otherwise, the program would not have identified them as working time), it makes sense to compensate the employee for them as regular working time.²¹⁹ However, this solution may lead to absurd results. Davidov discusses the similar concept of being “on call,” and argues that employees who are on call should not be compensated only for the exact minutes in which they had to work, since this may violate the purposes of a minimum wage.²²⁰ For instance, the employee can be on call during a night shift and answer only four phone calls during the night, each lasting only two minutes. Does it make sense to compensate the employee for only eight minutes of working time,²²¹ or should we compensate

²¹⁶ See, Part IIB1, “On the Third Generation of Telework, Time Porosity, and ‘W-est’”, *above*, for more on this topic.

²¹⁷ More information on the ability to use programs to solve problems deriving from their own characteristics can be found in Lerouge, *supra* note 88 at 225.

²¹⁸ See Guylaine Vallée, “Employees’ Obligation to Be Available to Employers: A (New) Pathway to Precariousness or a Source of Flexibility?” (2016) 32:3 Intl J Comp Lab L & Ind Rel 275 at 276–77; Part IIB1, “On the Third Generation of Telework, Time Porosity, and ‘W-est’”, *above*.

²¹⁹ For the justifications and purposes of the idea of working time, see the text accompanying notes 24–31.

²²⁰ See Guy Davidov, “A Purposive Interpretation of the National Minimum Wage Act” (2009) 72:4 Mod L Rev 581 at 602–03 [Davidov, “National Minimum Wage Act”].

²²¹ See *ibid* at 600. See also Davidov, *Purposive Approach to Labour Law*, *supra* note 25 at 204–07.

them at a higher rate that also takes into account the time they were potentially available to the employer and could not do whatever they wished?²²² Since the employee was available to the employer throughout the night shift, the employee should be compensated at a higher rate than for only eight “pure” minutes of working time.

Being on call is not identical to conducting time-porous work. When employees are on call, they are explicitly supposed to be available to work during this time.²²³ However, there are obvious similarities. The notion of time porosity arose from the fact that in the digital reality, the employee is *implicitly* required to be available to work and to continuously answer emails, phone calls, and WhatsApp messages during leisure time.²²⁴ Furthermore, time porosity seems to have a greater influence on the well-being and health of employees, who cannot enjoy pure break time during which they are completely unavailable.²²⁵ Employees from around the world describe how the habit of working outside of the workplace without any clear boundaries influences their ability to enjoy family life and actual rest time.²²⁶ Bearing in mind the influence of time porosity on the employee, and to deter the employer from encouraging these practices, it would be justified to compensate the employee at a higher rate for time porosity in general rather than for the exact minutes spent on a task.

Hence, compensation for time porosity should be determined by default rules that favour the employee and should be assigned a higher value than the basic working time unit (i.e., more than the regular payment per hour). For instance, the basic provincial rule could be that working during time porosity is compensated by twice and half the basic working time unit (a rate of 250 per cent).²²⁷ However, the value of this time porosity can vary from one case to another and should be determined with the employee representatives or the employee (or with the assistance of the occupational

²²² Note that the *Canada Labour Code*, *supra* note 182, Part III, Division I does not refer to time spent waiting for a call, which suggests that being on call is not considered to be work. However, *Canada Labour Standards Regulations*, CRC 2019, c 986, s 11.1 clarifies that “[a]n employer shall pay an employee who reports for work at the call of the employer wages for not less than three hours of work at the employee’s regular rate of wages, whether or not the employee is called on to perform any work after so reporting for work.”

²²³ See Davidov, “National Minimum Wage Act”, *supra* note 220 at 601.

²²⁴ See Genin, “Proposal for a Theoretical Framework”, *supra* note 17 at 291. See also Vallée, *supra* note 218 at 275–76.

²²⁵ See Ofek-Ghendler, *supra* note 25 at 12–16.

²²⁶ See Eurofound & ILO, *Working Anytime, Anywhere*, *supra* note 36 at 29–32.

²²⁷ Cf to the overtime payment regime described in *supra* note 12, which stands in Ontario and Quebec at 150 per cent of the basic working time unit. Due to the reasons elaborated so far, the payment for time-porous work should be at a higher rate than overtime payment.

health and safety committee) in a deliberate manner, taking into consideration the uniqueness of the workplace and the position of the employee performing time-porous work.²²⁸ Another relevant consideration is the nature of time porosity in a particular position, including its frequency, duration, and intensity.²²⁹ Based on these factors, the employee representatives or the employee and the employer are best positioned to determine the real value of time porosity and to reach a more nuanced and suitable agreement than the general default rule. Again, in cases of disagreement, the default rule should be mandatory.

3. The Right to Have a Break: Where Do We Go from Here?

Along with the calculation and payment of all the actual working time units of the employee, it is important to clarify that the model does not suggest that the idea of rest time should be eliminated as long as the employee is compensated for the work conducted during supposed rest time. The opposite is true. As has been clarified throughout this article, genuine rest time is important for the employee's health and well-being and is an integral part of the employee's dignity.²³⁰ Thus, the idea of rest time that is separated from work time should also be preserved in the proposed model.

However, compared to the suggestions regarding working time calculation, here the optional contribution of the model to the current legal framework is more modest and limited. As previous research has shown, the most effective way to change the problematic habit of constant remote work is to change the work culture and norms.²³¹ This, however, is something that the model cannot do. An electronic system can, of course, totally prevent the employee's ability to conduct work outside of the office or during what seems to be rest time.²³² However, this will also disable the employee's ability to enjoy a flexible work schedule and to have their preferred work-life balance, adjusted to their own needs or familial obligations.²³³ In other words, it can prevent the employee from enjoying the opportunities that the digital age has provided.

Thus, the benefit of the proposed model regarding the question of rest time is that the constant calculation of working time can make work during

²²⁸ For more on this topic, see the text accompanying notes 208–15.

²²⁹ Cf Ofek-Ghendler, *supra* note 25 at 41–43.

²³⁰ See more in the discussion on “Time in Labour Law” in Part I, *above*.

²³¹ See Mankins, *supra* note 91.

²³² Cf to BMW and Daimler's initiatives in Germany in Eurofound & ILO, *Working Anytime, Anywhere*, *supra* note 36 at 50.

²³³ For further discussion on the benefits of ROWE and NWW, see Part IIIB, “Avoiding Time Calculation and Shifting to Other Forms of Payment”, *above*.

rest time more transparent to the relevant parties and economically unviable for the employer. Since the model is based on the automatic calculation of all the actual working time units of the employee, it exposes all the exact working time units the employee has conducted during their supposed leisure time. This sort of explicit and detailed exposure can enable the parties to understand the real implications of remote work on the idea of rest time, as well as the gap between the legal framework in this regard and the actual reality. This can serve as an important and perhaps essential stage in the educational process of changing the work culture in the workplace, since it stops the prosaicness, casualness, and lack of transparency of work during time porosity.²³⁴ In addition, this sort of exposure can serve as legal evidence in the event of an employee's future lawsuit brought against their employer for violating their right to rest, thus deterring the employer from encouraging work during time porosity. Similarly, since work during time porosity costs employers much more than work conducted during basic working hours, the employer will have the economic incentive to minimize it as much as possible. In this way, the model also seems to have positive implications for the idea of rest time, even if in a limited and indirect manner.

Conclusion

The digital reality, and ICT in particular, has changed the concept of working time. As the ESDC report emphasizes, the ability to work from a distance has challenged the classical boundaries between work and leisure. However, as presented throughout this article, ESDC's suggestion to embrace a Canadian version of the right to disconnect suffers from deficiencies and may be insufficient. The digital reality has indeed challenged the classical purposes of working time regulation, but it has also introduced many new positive contributions to the labour field that are worth preserving, such as increased flexibility and autonomy.

These contradictory trends and the two conflicting models developed to resolve the modern working time dilemma—having strict working time limitations or avoiding them and switching to other payment models—prompt us to look for a third solution, which combines legal protections with values associated with the digital reality. This article has proposed such a model, which includes both mandatory and default elements.

At the heart of the model is the mandatory rule to use ICT to count every actual working time unit. Thus, this model uses technology not only as a means to conduct work but also as a regulation tool. The value of the extra working time units—overtime and time porosity—is an issue to be

²³⁴ Cf to the discussion in Part IIB1, "On the Third Generation of Telework, Time Porosity, and 'W-est'", *above*; Messenger & Gschwind, *supra* note 62 at 202–04.

negotiated between the employer, the employee, and the employee representatives (or with the assistance of occupational health and safety committees) and it can be adjusted to reflect the needs of specific positions and workplaces. This model also contributes to the employee's right to enjoy genuine leisure time, since it makes clear to all the parties how much time an employee has actually devoted to work in every month, including during supposed leisure time.

Unlike the right to disconnect as it is currently understood, the proposed model contains specific rules intended to avoid ambiguity and enables more flexibility and autonomy for both the employee and the employer through its default sections. Meanwhile, unlike the management models that have moved away from time measurement to performance or outcome measurement, the proposed model, through its mandatory elements, ensures the protection of the employee's health, well-being, and dignity.

The proposed model has its shortcomings. It requires the employee representatives to play a significant role, which may not always be realistic in practice. Moreover, the model assumes a constant dialogue between the parties, which may lead to complications and a prolonged regulation process. However, it also offers a new way to view the working time dilemma and to engage with current difficulties in a nuanced manner that takes into account the employee's and the employer's needs and perspectives, as well as the new opportunities offered by the digital reality.
