DYNAMICS OF VIRTUAL WORK

Labour in Contemporary Capitalism

What Next?

Ursula Huws

Dynamics of Virtual Work

palgrave macmillan

Ursula Huws

Labour in Contemporary Capitalism

What Next?

palgrave
macmillan

2019

Contents

Acknowledgements

I have spent most of my working life outside the protection of a permanent, tenured job, often in isolation from the academy. Nevertheless, I have been privileged to work, over the years, with a large number of fellow researchers who have provided me with intellectual stimulation, friendship and practical help and without whom it would have been impossible to carry out the work that underpins this book. There are far too many to list here, but I would like to single out a few whose contributions have been especially important to me and to this book. Leo Panitch, Colin Leys and Greg Albo at *Socialist Register* have promoted my work and encouraged me to continue at times when I was close to despair that my work would ever be recognised. Christoph Hermann provided useful comments on early draft chapters. In the co-coordination of international projects involving multifaceted research design, and the integration of teams from disparate disciplinary and national backgrounds (as well as a variety of temperaments), Monique Ramioul and Jörg Flecker have provided level-headed leadership in a manner that has been collegiate and principled, providing both personal and intellectual support. I have been immeasurably helped in the analysis of statistics by Quentin Outram, John Hall and Peter Bates. And for help with

interviews I have been lucky enough to work with Sarah Podro, who, as well as being able to carry out shrewd and insightful policy analysis on the hoof, has a unique ability to convert an unpromising rebuff from a recalcitrant informant into active cooperation through the gift of her humour, and with Simone Dahlmann, whose professionalism as a researcher and personal warmth enable her to extract quotable nuggets of gold from interviews with anyone from the CEO to the forklift truck driver. Now in the twilight of my career, I am fortunate to be working with a team who combine between them a broad range of these intellectual, managerial, quantitative and qualitative research skills: Nelli Kambouri, Neil Spencer and Kaire Holts. This book is dedicated to all the researchers I have worked with, named and unnamed, as well as the countless workers whose life stories have made up the raw material for this research and for the sake of whose future, and that of their children and grandchildren, it has been written.

1

Introduction

When the ocean tide retreats, the underlying distribution of the ecosystem of the beach becomes visible: the arrangement of the rocks and pools and the rearrangement of the living organisms since the last low tide are re-exposed to view in new and surprising configurations, in all their shining strangeness. Just so do the recurrent crises of capitalism display the changes in the global landscape of labour, as the tides of profitability retreat. Since the last major crisis—that of 2007–2008—it has become apparent from the evidence on the newly exposed beach that represents the current state of the labour market that a number of trends that were already present in earlier years are now reaching critical mass. New patterns in the organisation of global value chains have been laid bare and new groups of workers have been sucked directly within the organisational scope of transnational corporations, under new conditions. And, as always, we struggle to make sense of the new patterns, which appear unprecedented, cataclysmic, even, impossible to describe using our existing vocabularies and difficult to categorise in our current schemae.

As the second decade of the twenty-first century draws to a close, the media are abuzz with sharply polarised debates about the future of work. Utopian visions of a post-capitalist world in which all the drudgery will

U. Huws, *Labour in Contemporary Capitalism*, Dynamics of Virtual Work,
https://doi.org/10.1057/978-1-137-52042-5_1

be carried out by machines and people are free to enjoy a life of leisure and creativity jostle with dark dystopian views of a future society in which the majority of the population is reduced to precarious penury under the all-seeing gaze of a panoptic authority that monitors every aspect of life. New technologies play a central role in these forecasts, whether they are seen as elevating us to the status of 'citizen cyborgs'[1] through the use of implanted brain-machine interfaces (BMIs)[2] or reducing us to the status of 'techno-serfs' controlled by algorithms.[3] Scholars, policy-makers and pundits attempting to get to grips with the potential impacts of new technologies on the economy and on daily life find the existing vocabularies inadequate (or at least insufficiently headline-grabbing) to describe them and have come up with a veritable thesaurus of new terms.

I apologise in advance for the thicket of quotation marks and footnote references in the next few paragraphs. Readers will probably be familiar with some of these terms, though not all and, even for those who have already come across most of them, encountering them *en masse* like this may feel very much like trying to swim through a kelp forest. It is, though, this very density of terminology that I want to draw attention to because of the way it impedes clarity of thought and disconnects the current discourse from past scholarship. Any attempt to make sense of the current changes therefore require, as a precondition, that we find some way to cut through this obfuscation.

So, to return to the copious literature on the future of work, are we witnessing the emergence a new kind of capitalism? Some authors suggest that we might think of it as 'digital capitalism',[4] 'informational

[1] Hughes, J. (2004) *Citizen Cyborg: Why Democratic Societies Must Respond to the Redesigned Human of the Future*, Cambridge MA: Westview Press.

[2] Lebedev, M. A. & Nicoleis, M. A. L. (2006) 'Brain–Machine Interfaces: Past, Present And Future', *TRENDS in Neurosciences*, 29 (9): 536–546.

[3] Moore, M. (2015) 'How to Stop the Tech Giants Turning Us into Techo-serfs', *New Statesman*, February 9. Accessed on May 9, 2018 from: https://www.newstatesman.com/sci-tech/2015/02/how-stop-tech-giants-turning-us-techo-serfs.

[4] Schiller, D. (2000) *Digital Capitalism: Networking the Global Market System*, Cambridge, MA: MIT Press.

capitalism'[5] 'cognitive capitalism',[6] 'communicative capitalism',[7] 'bio-capitalism',[8] 'platform capitalism'[9] or 'surveillance capitalism'.[10] Or perhaps these changes mean that capitalism as we know it cannot survive and we are actually entering a world that is 'post-capitalist'[11]?

Other pundits do not go so far as to question the impact on capitalism as a system but argue that we need to recharacterise the economy in the digital era. Perhaps, it is suggested, we should think of it as a 'platform economy',[12] 'reputation economy',[13] 'gig economy',[14] 'mesh economy',[15] 'attention economy'[16] or 'sharing economy'[17] in which the relationship between production and consumption has been transformed

[5]Castells, M. (1996) *The Rise of the Network Society: The Information Age: Economy, Society, and Culture*, Volume I, Oxford: Blackwell.

[6]Moulier-Boutang, Y. (2012) *Cognitive Capitalism*, Oxford: Polity Press.

[7]Dean, J. (2005) 'Communicative Capitalism: Circulation and the Foreclosure of Politics', *Cultural Politics*, 1 (1): 51–74

[8]Moroni, C. & Fumagalli, A. (2010) 'Life Put to Work: Towards a Life Theory of Value', *Ephemera*, 10 (3/4): 234–252.

[9]Srnicek, N. (2017) *Platform Capitalism*, Cambridge: Polity Press.

[10]Zuboff, S. (2019) *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*, London: Profile Books.

[11]Mason, P. (2015) *PostCapitalism: A Guide to Our Future*, London: Penguin; Dyer-Witheford, N. (2015) *Cyber-Proletariat: Global Labour in the Digital Vortex*, London: Pluto Press.

[12]Kenney, M. & Zysman, J. (2016) 'Choosing a Future in the Platform Economy: The Implications and Consequences of Digital Platforms', *Issues in Science and Technology*, XXXII (3). Accessed on May 9, 2018 from: http://issues.org/32-3/the-rise-of-the-platform-economy/.

[13]Gandini, A. (2016) *The Reputation Economy: Understanding Knowledge Work in Digital Society*, London: Palgrave Macmillan.

[14]Friedman, G. (2014) 'Workers Without Employers: Shadow Corporations and the Rise of the Gig Economy', *Review of Keynesian Economics*, 2 (2): 171–188.

[15]Gansky, L. (2010). *The Mesh: Why the Future of Business Is Sharing*, London: Portfolio Penguin.

[16]Davenport, T. H. & Beck, J. C. (2002) *The Attention Economy: Understanding the New Currency of Business*, Cambridge, MA: Harvard Business Press.

[17]Benkler, Y. (2004) 'Sharing Nicely: On Shareable Goods and the Emergence of Sharing as a Modality of Economic Production', *The Yale Law Journal*, 114: 273–358.

through 'peer-to-peer networking',[18] 'collaborative consumption',[19] 'prosumption',[20] 'co-creation'[21] or simply 'playbour'.[22]

Others ask how we should designate the labour that is accessed in this new kind of economy: 'the human cloud'[23]? 'liquid labour'[24]? a 'workforce on demand'[25]? or a 'just-in-time workforce'[26]? Can the process by which atomised workers are recruited best be described as 'crowdsourcing'[27] or 'cloudsourcing'[28] or sourcing through 'online talent platforms'[29]? And should the work itself be designated 'click work'[30] 'artificial artificial intel-

[18] Bauwens, M. (2005) 'The Political Economy of Peer Production', *Ctheory.net*. Accessed on May 9, 2018 from: https://journals.uvic.ca/index.php/ctheory/article/view/14464/5306.

[19] Botsman, R. & Rogers, R. (2010) *What's Mine Is Yours: The Rise of Collaborative Consumption*, New York: Harper Business.

[20] Ritzer, G. & Jurgenson, N. (2010) 'Production, Consumption, Prosumption', *Journal of Consumer Culture*, 10 (1): 13–36, following Toffler, A. (1980) *The Third Wave*, New York: Bantam Books.

[21] Prahalad, C. K. & Ramaswamy, V. (2000) 'Co-Opting Customer Competence', *Harvard Business Review*, January/February. Accessed on May 9, 2018 from: https://hbr.org/2000/01/co-opting-customer-competence; Banks, J. & Humphreys, S. (2008) 'The Labor of User Co-creators', *Convergence*, 14 (4): 401–418.

[22] Kücklich, J. (2005) 'Precarious Playbour: Modders and the Digital Games Industry', *The Fibreculture Journal*, 5. Accessed on May 9, 2018 from: http://five.fibreculturejournal.org/fcj-025-precarious-playbour-modders-and-the-digital-games-industry/.

[23] Kaganer, E., Carmel E., Hirschheim, R., & Olsen, T. (2012) 'Managing the Human Cloud', *MIT Sloan Management Review*, December 18: 10–14.

[24] Accenture (2016) 'Liquid Workforce: Building the Workforce for Today's Digital Demands', *Technology Vision*, Accenture. Accessed on May 5, 2017 from: https://www.accenture.com/fr-fr/_acnmedia/PDF-2/Accenture-Liquid-Workforce-Technology-Vision-2016-france.pdf.

[25] OnForce (2017) *Workforce as a Service*. Accessed on April 24, 2017 from: http://www.onforce.com/features.

[26] De Stefano, V. (2016) *The Rise of the 'Just-in-Time Workforce': On-Demand Work, Crowdwork and Labour Protection in the 'Gig-Economy*, Geneva: International Labour Office.

[27] Howe, J. & Robinson, M. (2005) 'The Rise of Crowdsourcing', *Wired*, Issue 14.06, June.

[28] Vaquero, L. M., Rodero-Merino, L., Caceres, J., & Lindner, M. (2008) 'A Break in the Clouds: Towards a Cloud Definition', *ACM SIGCOMM Computer Communication Review*, 39 (1): 50–55; Muhic, M. & Johansson, B. (2014) 'Cloud Sourcing–Next Generation Outsourcing?' *Procedia Technology*, 16: 553–561.

[29] McKinsey Global Institute (2015) *A Labor Market That Works: Connecting Talent with Opportunity in the Digital Age*, McKinsey & Company. Accessed on May 9, 2018 from: https://www.mckinsey.com/featured-insights/employment-and-growth/connecting-talent-with-opportunity-in-the-digital-age.

[30] Armenti, J. (2014) 'Click-Work or Click-Play: Crowdsourcing and the Work-Leisure Distinction', Seton Hall University, Law School Student Scholarship. 137. Accessed on May 9, 2018 from: http://scholarship.shu.edu/student_scholarship/137; Deng, X. N. & Joshi, K. D. (2016) 'Why Individuals Participate in Micro-Task Crowdsourcing Work Environment: Revealing Crowdworkers'

ligence'[31] 'crowd work'[32] 'digital labour'[33] or even, using an apparently oxymoronic term, 'immaterial labour'[34]?

This by no means exhaustive catalogue of terms illustrates just some of the ways that commentators struggle to make sense of the immensity of the changes we are living through, in which all past social and economic certainties seem to be put in question. Such confusion is not new. In the 1990s there was a similar spate of hyperbole and new terminology. We heard then, for example, about the 'death of distance',[35] the 'end of geography'[36] and the rise of 'turbo capitalism'.[37] We were told that the economy had become 'weightless',[38] 'connected',[39] 'digital',[40] 'knowledge-based'[41] or simply 'new'.[42] We were told we were living in an 'information

Perceptions', *Journal of the Association for Information Systems*, 17 (10): 648–673. Clickworker is also the name of an online platform based in Germany.

[31]The term used by Amazon Mechanical Turk to refer to its own workforce. See also *The Economist* (2006) 'Artificial Artificial Intelligence', June 8.

[32]Mandl, I., Curtarelli, M. R., Riso, S., Vargas, O. L., & Gerogiannis, E. (2015) *New Forms of Employment*, Dublin: Eurofound.

[33]There is a large literature that uses this term. See for example Burston, J., Dyer-Witheford, N., & Hearn, A. (2010) 'Digital Labour: Workers, Authors, Citizens', *Ephemera*, 10 (3/4); Scholz, T. (2011) 'Facebook as Playground and Factory', in D. E. Wittkower (ed) *Facebook and Philosophy*, Chicago: Open Court: 241–252.

[34]Hardt, T. & Negri, A. (2001) *Empire*, Cambridge, MA: Harvard University Press; Hardt, T. & Negri, A. (2009) *Multitude: War and Democracy in the Age of Empire*, London: Penguin.

[35]Cairncross, F. (1997) *The Death of Distance: How the Communications Revolution Will Change Our Lives*, Boston, MA: Harvard Business School Press.

[36]Graham, S. (1998) 'The End of Geography or the Explosion of Place? Conceptualizing Space, Place and Information Technology', *Progress in Human Geography*, 22 (2): 165–185.

[37]Luttwak, E. (1999) *Turbo Capitalism: Winners and Losers in the Global Economy*, London: Orion Business Publishing.

[38]Coyle, D. (1997) *Weightless World: Strategies for Managing the Digital Economy*, Oxford: Capstone Publishing.

[39]Meyer, C. & Davis, S. (1998) *Blur: The Speed of Change in the Connected Economy*, South Port: Addison-Wesley, South Port.

[40]Tapscott, D. (1995) *The Digital Economy: Promise and Peril in the Age of Networked Intelligence*, New York: McGraw Hill.

[41]Neef, D. (ed) (1998) *The Economic Impact of Knowledge (Resources for the Knowledge-based Economy)*, Boston: Butterworth-Heinemann.

[42]A term that was widely used throughout the 1990s. See for example, Gordon, R. J. (2000). 'Does the "New Economy" Measure Up to the Great Inventions of the Past?', *Journal of Economic Perspectives*, 14 (4): 49–74. American Economic Association.

society'[43] and working in 'virtual organisations'[44] with workers defined as 'digital nomads',[45] 'digerati',[46] the 'cognitariat',[47] 'symbolic analysts',[48] and many other terms.[49] The developments these terms sought to describe seemed exciting and new during the late 1990s, a period of hectic and unsustainable growth—the 'dot-com boom'—that led up to a crash (the 'bursting of the bubble') at the turn of the Millennium (in which it was estimated that the worth of most internet stocks, which had peaked six months earlier, declined by 75%, wiping out $1.755 trillion in value[50] by November 2000). But this discourse too echoed similar language from earlier periods.

As early as 1966, US management consultant Peter Drucker was using the phrase 'knowledge worker'[51] and three years later French sociologist Alain Touraine coined the term 'post-industrial society',[52] later taken up in the USA by Daniel Bell.[53] 'Telematics' (a translation into English of the French *télématique*) was first used in a 1978 French government report[54] reflecting a growing public debate about the economic and social impacts of the marriage of computerisation with telecommunications. Much discussion in the mass media in the 1970s focused on miniaturisation and the cheapness of the silicon chip, making the use of computers (which, up to that point had been large expensive mainframes) increasingly ubiquitous. In the UK, a BBC *Horizon* Programme, broadcast in 1978, called *Now the Chips are Down* represented a turning point in public attitudes,

[43] Webster, F. (1995) *Theories of the Information Society*, London: Routledge.

[44] Norton, B. & Smith, C. (1998) *Understanding the Virtual Organization*, Hauppage, NY: Barrons Educational.

[45] Makimoto, T. & Manners, D. (1997) *Digital Nomads*, Chichester: Wiley.

[46] Brockman, J. (1996) *Digerati: Encounters with the Cyber Elite*, London: Orion Business Publishing.

[47] A term originally coined by Alvin Toffler, in Toffler, A. (1970) *Future Shock* and later taken up by Antonio Negri in Negri, A. (2006) *Goodbye Mr. Socialism*, New York: Seven Stories Press.

[48] Robert Reich (1991) *The Work of Nations*, New York: Simon & Schuster.

[49] These and many other such terms are discussed in Barbrook, R. (2006) *The Class of the New*, London: Mute Publishing.

[50] Kleinbard, D. (2000). 'The $1.7 trillion dot.com lesson', CNNMoney, November 9.

[51] Drucker, P. F. (1966) *The Effective Executive*, New York: Harper and Row.

[52] Published in English as Touraine, A. (1974) *Post-industrial Society*, London: Wildwood House.

[53] Bell, D. (1976) *The Coming of Post-industrial Society*, New York: Basic Books.

[54] Published in English as Nora, S. & Minc, A. (1980), *The Computerization of Society: A Report to the President of France*, Cambridge, MA: MIT Press.

triggering scare stories in the media about the millions of jobs it was estimated would be lost as a result of computerisation (remarkably similar to the stories in the press in the 2010s about the impact of robotisation). This was also a period when contrasting extrapolations led to predictions in the sociological literature of 'the end of the working class'[55] or 'the end of work'.[56] Some writers saw the new technologies as opening up the possibility for Utopias in which automation would be used to cut back the working week, and minimise the amount of socially necessary work, with the remaining time released for unalienated creative labour.[57] Others warned that the new technologies would lead to mass unemployment.[58] Among labour sociologists, the work of Harry Braverman[59] opened up new debates about the deskilling effects of new technologies.

What is clear from all this is that the discussions taking place today have precedents in other periods of restructuring. Each time a new wave of automation comes along it takes people by surprise, rocking their known world to the foundations and making them question every assumption they have taken for granted in the past, not just about how economies and labour markets work but even about the foundations of our social order. Each time it is felt that existing vocabularies are inadequate to describe the changes and that existing institutions are incapable of accommodating them. It is as though an earthquake is taking place, disrupting the familiar structures that form the bedrock of our society and give us our places in it—the educational curricula and the qualifications they confer, the ways we communicate, the skills we need to survive, the occupational structures that position us in the labour market, the satisfaction we get from our work, the security of employment we can expect and the rewards that await us.

---

[55] Gorz, A. (1982) *Farewell to the Working Class*, London: Pluto Press.

[56] Rifkind, J. (1995) *The End of Work: The Decline of the Global Labor Force and the Dawn of the Post-market Era*, New York: Putnam.

[57] See, for example, Gorz, A. (1985) *Paths to Paradise: On the Liberation from Work*, London: Pluto Press and a number of publications by Ivan Illich, including Illich, I. (1973) *Tools for Conviviality*, London: Marion Boyars; Illich, I. (1978) *The Right to Useful Unemployment*, London: Marion Boyars; and Illich, I. (1982) *Gender*, New York: Pantheon Books.

[58] See, for example, CSE Microelectronics Group (1980) *Capitalist Technology and the Working Class*, London: CSE Books; Harman, C. (1979) *Is a Machine After Your Job? New Technology & the Struggle for Socialism*, London: Socialist Workers Party.

[59] Braverman, H. (1974) *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century*, New York: Monthly Review Press.

And in disrupting these stable features they can seem to threaten the very basis of our civilisation. As Karl Marx put it so memorably in 1848:

> All fixed, fast-frozen relations, with their train of ancient and venerable prejudices and opinions, are swept away, all new-formed ones become antiquated before they can ossify. All that is solid melts into air.[60]

Each change is experienced on its arrival as unprecedented and cataclysmic, wrong-footing established businesses and regulators as well as other social actors such as researchers, educators and trade unionists. Bombarded with confusing information, often couched in variants of puzzling new jargon, politicians may be urged to deregulate or reregulate, to let the market rip or attempt to control it. There is a confusing cacophony of advice—from representatives of new businesses and of old ones, from consultants, academics and self-appointed gurus—based on a shifting raft of evidence, much of it anecdotal, because there are as yet no statistics to measure the new phenomena, which have yet to be defined. Politicians may feel trapped between competing imperatives. On the one hand they seek to encourage innovation, on the other they want to safeguard jobs. They also want to be re-elected. In the ensuing rush to find solutions that keep everybody happy, it may seem as if none of the existing tools are adequate to the task and that nobody has ever had to face such difficult decisions before. But is this really the case? Could it be that it is the sense of stability and predictability most people regard as normal that is in fact illusory, and that periodic upheavals are to be expected? Is this devastating creative-destructive volatility, in fact, capitalism as usual? Or, as Bon Jovi put it in his 2010 song *the more things change, the more they stay the same*, 'it's the same damn song with a different melody'?

This is not an easy question to answer. I have been researching changes in labour markets and the impacts of technological change since the 1970s. In the intervening period, there have been innumerable prophecies that we are about to witness the end of the post-war model of stable, full-time, permanent employment that reached its peak in the 1950s and 1960s. At first, attention focused on the deskilling effects of digitalisation and the

[60] Marx, K. & Engels, F. (1848) *Manifesto of the Communist Party.* Retrieved on May 10, 2018 from: https://www.marxists.org/archive/marx/works/download/pdf/Manifesto.pdf.

mass unemployment that might result from computerised automation. In the 1980s attention shifted to the potential of communications technologies to relocate employment in the form of teleworking. By the 1990s, when global telecommunications networks were in place and the Internet was born, the discourse opened up to encompass worries about offshore outsourcing of digitalised services. Now, in the twenty-first century, there are similar fears: on the one hand, a resurfacing of concerns that the use of robots will destroy skilled jobs, and, on the other, apprehension about the exponentially spreading use of online platforms for managing work.

Viewed from one perspective this can be seen as four decades of unrealised scaremongering. Eurostat figures show that over much of this period most employment in Europe remained obstinately traditional in its form. The proportion of the workforce that was self-employed hovered around 15% for decades, as did the proportion with a contract of limited duration. By 2015, it was still the case that 58% of the 221 million people employed in the EU were employees with a fulltime permanent contract while only 15% were self-employed, 12% were temporary employees and 14% were part-time employees.[61]

However viewed from another perspective it is this apparent stability that is deceptive. A seemingly calm surface may hide major turmoil below. Official EU statistics also show that non-standard employment is growing rapidly (from 23% among 25–39-year-olds in 1995 to 32% in 2016) and could become a majority of all employment by 2030 if present trends continue.[62] In 2015, the International Labour Organization reported 'a global shift away from the standard employment model, in which workers earn wages and salaries in a dependent employment relationship vis-à-vis their employers, have stable jobs and work full time. In advanced

[61] Broughton, A., Green, M., Rickard, C., Swift, S., Eichhorst, W., Tobsch, V., Magda, I., Lewandowski, P., Keister, R., Jonaviciene, D., Ramos Martín, N. E., Valsamis, D., & Tros, F. (2016) *Precarious Employment in Europe: Part 1: Patterns, Trends and Policy Strategy*, Brussels: European Parliament Briefing. Accessed on May 18, 2018 from: http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/587303/IPOL_BRI%282016%29587303_EN.pdf.

[62] European Commission (2017) *Working Document Accompanying Second Phase Consultation Document of Special Partners under Article 154 TFEU*, Brussels: European Commission Directorate General for Social Affairs, November 11. Accessed on January 28, 2018 from: http://ec.europa.eu/social/main.jsp?catId=1312&langId=en.

economies, the standard employment model is less and less dominant'.[63] Meanwhile, the number of workers who are not on standard employment contracts continues to rise. In the UK, for example, those on zero-hours contracts grew by three-quarters of a million between 2006 and 2016 while those on temporary contracts increased by over 200,000 in the same period.[64] So have those predicting the end of the standard employment model just been crying 'wolf'? Or are there deeper changes going on below the radar of the official statistics? Are we experiencing a temporary blip? Or could the wolf finally have arrived?

The history of forecasting future trends in employment is, in the main, a history of experts getting things spectacularly wrong. Although they might sometimes be guilty of arrogance (perhaps in the interests of self-promotion), on the whole the writers who have been so mistaken are not to blame for these errors. There are a number of reasons for their failure but it can be instructive to understand what these are in order to avoid repeating them in the future.

First, forecasts are often based on an assumption that trends are linear. While some widely-touted developments never take off, others are adopted much more widely than anticipated. In 1985 the mobile phone company Vodaphone predicted that the future market for mobile phones would peak at one million. And indeed by 1995, a decade later, only 7% of the UK population owned one; but by 1998 this was about 25%, and by 1999 it was 46%, representing a 'tipping point'. In that year one mobile phone was sold in the UK every 4 seconds and by 2004 there were more mobile phones in the UK than people.[65] Simple extrapolation from existing trends is liable to produce inaccurate forecasts even using sophisticated modelling techniques that assume that adoption will adopt an 'S curve'. Sometimes forecasts are shaped by the forecaster's own hopes or fears. For example it was widely believed in the mid-twentieth century that religious observance was dying out, a prospect embraced with enthu-

[63] International Labour Organization (2015) *World Employment Social Outlook: The Changing Nature of Jobs*, Geneva: ILO: 1.

[64] Booth, R. (2016) 'More Than 7m Britons Now in Precarious Employment', *The Guardian*, November 15.

[65] Wray, R. (2010) 'In Just 25 Years, the Mobile Phone Has Transformed the Way We Communicate', *The Guardian*, January 1. Accessed on May 20, 2018 from: https://www.theguardian.com/business/2010/jan/01/25-years-phones-transform-communication.

siasm by secular humanists and with trepidation by those who thought that this signalled the destruction of the moral foundations of society. Neither group anticipated the revival of religious fundamentalisms that took place in the last quarter of that century. However it is possible that both groups contributed indirectly to that very revival by a process that brings us to the second reason why forecasters so often get things wrong.

This is the phenomenon that philosopher call 'dialectics'—the way in which actions provoke reactions, which in turn provoke counter-reactions. Social behaviour provides innumerable examples of this: young people react against their parents' values when they find these constricting; workers resist exploitative practices their employers are trying to impose on them; marginalised social groups develop counter-cultures; elite groups join forces to protect their privileges. Multiplied across whole societies these practices can serve to shape and reshape history in ways that cannot be anticipated easily because they depend on the balance of forces in any given situation. In some situations such collective reactive behaviour can serve to reinforce conservatism and impede change; in others it can gather volume like a snowball and bring about a major social and cultural shift, like the 'sexual revolution' of the 1960s. But of course each change sets in motion the dynamics of the next.

Linked to these dynamics of resistance and reaction are other features of change that make it difficult to predict the future, sometimes referred to as 'unintended consequences'. When new technologies are introduced, for example, it is often assumed that they will be used for the purposes their designers originally had in mind. To return to the example of the mobile phone, when these were first introduced it was assumed that they would be used as substitutes for fixed phones by the affluent. And indeed they did become something of a status symbol for traders in financial centres like the City of London in the 1980s. What was less anticipated was that among the other early adopters would be people who had good reason to want to keep their location secret and avoid being listed in telephone directories, such as drug-dealers, pimps and other criminals. Similarly some of the earliest commercial users of the Internet in the 1990s were pornographers and vendors of off-prescription drugs. By the twenty-first century the 'dark web' had become a reality and the annual cost of cybercrime was estimated

by Forbes magazine at $6 trillion.[66] Meanwhile drones are being used to smuggle drugs, guns and mobile phones into prisons and across national borders, not to mention potential terrorist uses, while medical advances are misused for purposes as varied as organ harvesting and date rape. In other words, any new technology is liable to be used for harmful, as well as beneficial purposes. Attempts to outlaw or manage these socially harmful activities have further consequences. They may, for example, give rise to new industries designed to prevent hacking or enhance surveillance, but these may also create new social risks for the general population ranging from the minor annoyance of having to repeatedly enter, and change, passwords to more serious constraints on personal freedom or invasions of privacy.

Attempts to predict the future must therefore factor in the impacts of unintended consequences as well as those of resistance and reaction to change. But this is not all. They must also take account of a fourth factor: inertia. 'If it ain't broke, don't fix it' is a principle that many adopt in their lives and abandon only with extreme reluctance. In fact some cling to their existing practices as long as possible and only change when forced to do so because the old solutions have become unavailable or unaffordable or survival depends on being similarly equipped to neighbours, family members, suppliers or customers. What may seem like an occasional stubborn exception to a larger trend can, when multiplied across a whole population, present obstacles to change of larger statistical significance, forcing companies and policy makers to continue offering the old options alongside the new ones that replace them: both analogue and digital radio, for example; both fixed-line and mobile phone networks; both printed books and ebooks; both shops and websites. This introduces additional distortions for forecasters to deal with and may even add extra costs and complexities in areas where economies were expected.

When it comes to more specific predictions about the future of work, a range of other considerations also come into play. Some of these are related to the way that existing labour markets are currently charted, for instance by focusing only on the existing economic landscape and, using

[66]Eubanks, N. (2017) 'The True Cost of Cybercrime for Businesses', Forbes, July 13. Accessed on May 20, 2018 from: https://www.forbes.com/sites/theyec/2017/07/13/the-true-cost-of-cybercrime-for-businesses/#182086b54947.

a zero-sum-game logic, carrying out a detailed analysis of the jobs that are likely to disappear or be deskilled, while failing to notice new jobs that will be created outside the scope of the existing economy. Others are related to commentators' own unexplored assumptions and the perspective they bring to their research. Many experts are quick to form value judgements, labelling tendencies as 'good' or 'bad', often without specifying for whom they are good, and for whom bad. Most changes create both winners and users, and some may be good for people in one capacity (for example as consumers who benefit from lower prices) but bad in another (for example as workers whose earnings are reduced) but such subtle trade-offs are hard to bring to visibility in the general rush to position people as techno-optimists or pessimists.

This book draws on over four decades of research on changes in work and the social consequences of these changes. This research has included detailed analysis and critique of existing statistics, work with policymakers to develop new statistics, a range of different surveys, both of businesses and of the general population, organisational case studies and many, many interviews with a wide range of workers, managers, trade unionists and other social actors as well as other, more experimental research methods. Its purpose is to share with readers the concepts and methodologies I have found helpful in trying to make sense of the changes I have observed, some tumultuous, some seemingly modest and unimportant. It does not aim to produce any new definitive forecast of the future of work but to offer tools for understanding the convulsive development of capitalism in the twenty-first century and the ever-changing and contradictory impacts of the resulting transformations for workers. In other words, its focus is on understanding the dynamics of change, not producing definitive predictions.

It is based in an analysis that sees capitalism as a relationship between labour and capital, two strands knotted inextricably together. Capital, in this view, is completely dependent on labour for its very existence, while labour—at least in a capitalist society—requires capital to provide it with subsistence. Capital and labour are locked together in a relationship which while mutually dependent is also strongly conflictual, as each party struggles to hang on to as large as possible a share of the value which is produced as a result of this grim union. Each move by one party provokes

a response from the other in a process that creates ever-greater entanglement as the organisation of capitalism, and hence that of the division of labour, becomes more complex. This makes it extraordinarily difficult to look at one side of this relationship independently from the other. Nevertheless, for the sake of conceptual clarity, it can be useful to focus on them separately.

I therefore start, in Chapter 2, by presenting a typology of labour that I find useful for understanding how it is transformed under capitalism. For ease of reference, this typology is also summarised in the table at the beginning of this book. Chapter 3 looks at what capitalism is and the dynamics of capitalist expansion. Chapter 4 puts the two together, seeking to explain the complex and sometimes contradictory relationship between them, in which labour seeks to organise and improve its conditions while capital searches for ways to remain unimpeded in its unceasing quest for new fields of profit, including, in the twenty-first century, drawing on a reserve army of labour that is global in scope. This process has a double impact. On the one hand, many jobs are deskilled, but, on the other—and inextricably connected to it, there is also a need for innovation, requiring creative workers to bring new technologies and processes into being. Chapter 5 focuses on creative workers, illustrating some of the shifts between the categories of labour described in Chapter 2 as capitalism develops. Chapters 6 and 7 focus on further great shifts in labour taking place in the twenty-first century, looking at some of the ways in which socially reproductive labour is transformed into capitalist labour, firstly through the privatisation and outsourcing of public services and secondly through the commodification of the sorts of household labour that were in the past carried out in the household either as unpaid labour or by domestic servants. Finally, Chapter 8 looks at the some of the implications of all these changes for the future.

2

Labour In and Out of Capitalism

The word 'labour' comes with a freight of different meanings. Used in many languages to refer to the process of bringing a child into the world, it conveys simultaneously a sense of immense creativity and of extreme pain. Pleasure and punishment are inextricably intertwined and this mutual entanglement persists, to varying degrees, in most of the other human activities that this verb describes. At one end of the spectrum are activities that produce high levels of creative satisfaction, even though they may involve mental effort and/or physical exertion. Into this category might come playing a musical instrument, tending one's vegetable garden, preparing a meal for loved ones, inventing a new game or solving a difficult puzzle. At the other are a range of monotonous, apparently meaningless activities that may entail a stressful need to focus, the repetitive use of particular muscles, exposure to toxins, noise, extremes of temperature or other hazards. Such jobs can be found all along the value chains by which modern commodities are produced, from the mines where the raw materials are extracted to the assembly plants, from the container ships to the ports, from the trucks to the warehouses, from the call centres in the customer fulfilment centres to the delivery vans that bring them to your front door.

U. Huws, *Labour in Contemporary Capitalism*, Dynamics of Virtual Work,
https://doi.org/10.1057/978-1-137-52042-5_2

But each worker is a complex human being with fluctuating moods and a varying ability to deal philosophically with the task in hand. From personal observation, for example, I surmise that some of the check-out operators in my local inner-city supermarket are in a mental zone of their own while they work, their hands engaged in an automated rhythm that enables them (while abstractedly greeting the customer) to swipe the goods and pack them without disturbing whatever inner chain of thought or inwardly hummed music gets them through the nearly intolerable stress of the job. If they can stay in that zone, they don't have to engage consciously with the unpleasant realities around them: the long impatient queue of people grumbling into their mobile phones; the eye-to-eye stand-off in the doorway between the security guards and the drunks they are supposed to prevent from being served alcohol; the prickle of just-avoided contact between people whose class and gender and ethnic diversities are such that they would rather not touch each other; the smell—a kind of olfactory entropy, made up of layer after muddled layer of chemicals, intermingled with the manifold varieties of animal and vegetable decomposition these chemicals are supposed to conceal or enhance. As a customer, one hesitates to engage these workers in a serious conversation for fear of jolting them out of this safe zone. There are of course other circumstances when it is precisely the everyday interaction with human customers that makes a service job tolerable or even something to look forward to. Care workers, for example, often express strong satisfaction with the feedback they get from grateful patients, even when their pay and working conditions are appalling. In other words, the experience of labour mixes the positive and the negative in complicated and fluctuating ways. The most mundane tasks may bring some sense of satisfaction to the worker who has carried them out well, while the most exciting may involve an element of drudgery. Think of the hours of muscle-ache-inducing practice the ballet dancer or professional footballer must put in, the boredom of waiting on a cold film location in uncomfortable costume, the painstaking preparation of materials for a sculpture. But think too of the joy of coaxing a smile from a traumatised child or receiving unexpected praise for a well-done job you thought nobody had noticed.

The word 'labour' is also used in other, more disembodied, senses. For the accountant it may refer simply to one category of cost—that which

involves the employment of human beings (what Karl Marx called 'living labour')—as opposed to other costs, such as the cost of raw materials, rent, fixed investments in machinery, transport etc. It is also used to refer to the collectivity of workers, or their representative agencies, such as trade unions ('organised labour'); and in some cases even to the political parties that purport to represent workers' interests. But let us for now stick with it as a term that refers to the activity by which human beings take care of themselves and others and thereby create value. The ultimate function of this labour—the human need it fulfils—has remained fairly constant over the millennia. Human ingenuity and knowledge is used to extract and harvest the planet's natural resources, manipulate and recombine them in order to produce food, shelter, warmth and entertainment and the wherewithal to reproduce, protect and perpetuate life, sociality and culture. However, albeit in different ways and with different degrees of complexity, human societies have also developed divisions of labour[1] to organise these activities so that tasks are not evenly distributed.

Divisions of labour have several dimensions. They include *hierarchical* divisions, determining who gets to boss whom around, *technical* divisions, determining who uses what tools for which tasks and how, *spatial* divisions, determining what work is done where, and by whom, *contractual* divisions, which dictate who is obliged to do what, for whom and for what reward, *ethnic* divisions, which segregate tasks according to racial, religious or caste identities, and, sometimes overlapping with these, *cultural* divisions, which determine the symbolic value of particular roles or tasks and the penalties for transgressing normative codes of conduct for carrying them out in any given society. Perhaps more important than any of these and playing a critical role in shaping all these other patterns is what feminists would argue is the most universal of all divisions of labour: the gender division of labour which, on the basis of the evidence, predates all others, existing in some form or other in every society that has ever been studied. This is a phenomenon that takes radically different forms in different contexts, and there is fierce disagreement amongst anthropolo-

[1] I do not attempt to address the very large sociological literature on the division of labour here for reasons of space. Readers who would like to delve deeper are advised to start with such classic works as Emile Durkheim's 1893 *Division of Labour in Society*, republished in 1997, New York: The Free Press and Ray Pahl's 1984 *Divisions of Labour*, Oxford: Basil Blackwell.

gists and paleoanthropologists about how and why it originated, but there seems to be little doubt that wherever human beings have lived together in groups there has been an arrangement whereby some tasks are performed mainly by women and some mainly by men. This gender division of labour has been reinforced, contorted and challenged by its many interactions with these other divisions of labour but nevertheless shows an amazing ability to adapt, survive and re-emerge in new forms when attempts are made to suppress it.

The subordination of workers to the control of others is often only achieved through coercion, exercised by the use of brute physical violence or more subtly reinforced through religious ideology or other cultural forces and, to the extent that this coercion succeeds, it is destructive of autonomy and can lead to punitive working conditions. But such forms of compulsion are not specific to capitalism and predate it by many centuries, as the extreme example of slavery demonstrates forcefully. The control of labour under capitalism may also include coercion and be experienced as exploitative and unpleasant, of course. But if we are to understand how divisions of labour change, it is important to distinguish between the types of control that can be found across many different forms of the division of labour and those features of labour organisation and control that are specific to capitalism.

This is by no means an easy task because of the complex ways that these different control structures interact with each other, in some cases reinforcing existing power relationships and in others challenging them. For example there are some social systems in which it is in the interests of employers to have women confined to the home, providing unpaid labour to keep other household members fed, clothed, socialised and educated so that the 'breadwinners' can work for long hours in waged work. In other situations, families are broken up so that all members can become part of a fluid itinerant pool of labour. The tensions between patriarchal forms of control and those exerted by employers in the labour market are thus played out in different ways in different contexts. Such tensions also have contradictory impacts on women, for whom entering the labour market may be experienced both as a means of liberation and as a new source of oppression and on men, who may feel trapped in their breadwinner

role even while enjoying the economic power over women that has been conferred on them by this role.

The context in which these contradictions are played out in our time is not a predictable or gradual one, in which compromises can be negotiated slowly and agreed patterns of behaviour transmitted down the generations. It is one where the speed of technological change and global restructuring impose violent shocks, forcing people into new behaviours and taking away traditional roles and tasks whilst simultaneously demanding new ones. Inherited power relations are disrupted; passed-on skills are rendered obsolete; new rhythms of personal life are imposed, dictated by novel demands set by employers. It may even be necessary for individuals to migrate to an alien culture on the other side of the world to survive economically, splitting families and creating a spatial divide between the earner's public labour market place and the place where the reproduction tasks paid for by those earnings occur. Such changes radically transform both the domestic division of labour and the technical and spatial division of labour, creating new stresses for both, as well as forcing men and women to relate to each other and organise their personal lives in entirely new ways.

Later chapters of this book explore some of the dynamic shifts in these divisions of labour and their mutual interactions, including the ways that paid and unpaid work morph into each other and the ways that patterns of segregation and segmentation in the workforce shift and resettle themselves. But before doing so, it is useful to set out a clear conceptual framework to be used for this analysis. So now, for the sake of clarity, I take a step back and look at the specific features of labour under capitalism, drawing on the work of Karl Marx, whose ideas still seem to me to provide useful tools for analysing labour and capitalism in the twenty-first century.

First, it must be repeated that exploitative labour relationships pre-date capitalism and still persist outside its scope in the twenty-first century. The capitalist system is indeed based on the exploitation of labour but what gives it its character as capitalism is the specific way that it does this, not the fact of exploitation itself. For Marx, a crucial concept for understanding the form of exploitation that is peculiar to capitalism is the *value* that is produced by any given type of labour. The most universal characteristic of all labour is that it produces a *use value*. This utility might

be to provide sustenance for oneself or one's household (e.g. by harvesting, hunting or cooking) to give pleasure (e.g. by singing to others, telling a story or decorating a place or a body), to integrate the household into the broader community and culture (e.g. by teaching children to speak and respect local codes of behaviour), to provide bodily care (e.g. by attending to a baby, nursing a sick person or cutting somebody's hair) or to provide other necessities of life (e.g. by making a pot, fetching water, building a shelter or lighting a fire). The labour that provides these use values may be voluntary or coerced, carried out for others or for oneself, paid or unpaid. The reward too may be provided in a variety of different ways. For example the labour may be carried out within a household in return for love and care or carried out for another household in the capacity of a servant; it may be reimbursed by the provision of shelter and sustenance; it may be rewarded by the payment of a wage by an employer or in the market through the sale of finished goods or harvested crops; or by any number of other complex arrangements that different societies have developed, such as slavery, indentured labour, caste-based occupational segregation, bondage or villeinage.

Where this labour produces goods or services that can be sold in the market, these goods and services have not just a use value but also an *exchange value*. This means that they can be sold for money or bartered for other goods or services. These exchangeable products of labour thus become *commodities* that can be bought and sold. Once sold, they cease to belong to the worker whose labour produced them. Trading in commodities is also something that has been going on for millennia. Archaeological evidence has revealed that shells, flints and obsidian were traded in the Stone Age and there was widespread international trade during the Bronze Age, for example, with artefacts from the Indus Valley civilisation turning up in Egypt, Sumeria and Mesopotamia.[2] To the extent that it too is bought and sold, labour itself is a commodity. Free workers own their own labour power which they sell to employers. In the case of slavery it is the slave who is bought and sold and constitutes the commodity; the slave's labour power is thus the property of the slave owner.

[2]Smith, R. L. (2009) *Premodern Trade in World History*, New York: Routledge.

The value of labour power varies according to the skills and knowledge and bodily strength and dexterity of a worker. A skilled, knowledgeable, inventive and experienced worker can produce more and better goods and services than a clumsy, ignorant, weak or inexperienced one. Nevertheless, outside capitalism, there are typically limits to the value that any given worker can produce. However skilled the embroiderer, there are only so many stitches that can be completed in an hour, however strong the porter, there are limits to how many bricks one person can carry at a time, however nimble-fingered the picker, the number of baskets that can be filled in a day with cherries is restricted. This means that the negotiation over the worker's reward for selling his or her labour power to the employer is in principle straightforward. The market value of the worker's labour may of course be affected by factors that are not directly related to his or her actual capacity to do the work (for instance by caste, gender, appearance, skin-colour or cultural tradition) but the transaction is relatively simple. In essence, there are two models. In the first, the worker invests his or her own labour power in harvesting or making a commodity which is then sold on the market for its exchange value. If that worker is a potter, then each pot will take approximately the same amount of time to make, and will bring roughly the same reward. If that worker is an itinerant knife-grinder, then each knife will take more or less the same amount of time to sharpen and, again will bring about the same reward. In the second model, the worker sells a particular quantity of labour time to the employer and the employer thereby gains the use value produced by that labour, which might or might not then be sold on to somebody else for its exchange value. For example a dairymaid might be paid for her labour to milk cows by a farmer who will use some of that milk to make cheese which is then sold to other customers. Each cow takes roughly the same amount of time to milk. So the labour power per cow that is necessary to produce the milk does not vary. A farmer with a larger herd might sell more cheese than a small farmer and might employ more dairymaids but the labour time per cheese remains more or less constant. The farmer may be making a profit out of employing the dairymaid but the relationship of that profit to the time put in by the worker remains roughly the same. Of course, I am greatly over-simplifying here, leaving out a lot of minor deviations relating to different practices, technologies and social relations which have

of course varied over time and between different cultures, but these do not greatly affect the principle of approximate parity within any given system.

What capitalism did was to introduce a new model of value creation that made it possible to increase the profit per worker hour so that such ratios no longer remained constant. Capitalism did not, of course, spring fully-formed out of nowhere but came about as a result of complex changes in social and economic relations, combining various pre-existing practices. For example it built on some of the roles played by merchants, bankers and moneylenders, including the monopolisation or domination by certain traders of particular routes and markets.[3] It also drew on the practices of landowners[4] and rentiers, including the owners of the first factories who rented out space for independent hand-loom weavers to work in rather than directly employing them.[5] It further made use of technological developments harnessing the power of fossil fuels to enhance the productivity of human labour and substitute for human or animal physical energy.[6]

By the end of the eighteenth century, a new model of industrial capitalism had become established, a model that was first analysed by Adam Smith[7] and David Ricardo[8] and later by Karl Marx.[9] A key feature of this model was the centralised management and control of production by a proprietor who owned the means of production (machinery etc.), purchased the raw materials, employed the workers and sold the final product. Another characteristic feature of this new system, which came to be called capitalism, was a new way of organising labour with the aim of reducing the cost of employing each worker while maximising the output each worker could produce. This rested on dividing tasks up as much as possible into standard units, in order to simplify the labour of any given

[3]Braudel, F. (1967–1979) *Civilization and Capitalism, 15th–18th Century*, London: Harper.

[4]Polanyi, K. (1944) *The Great Transformation*, New York: Farrar & Rinehart; Meiksins Wood, E. (1999) *The Origin of Capitalism: A Longer View*, London: Verso.

[5]Thompson, E. P. (1963) *The Making of the English Working Class*, Harmondsworth: Penguin.

[6]Altvater, E. (2007) 'Conceptualising Globalisation: Fossil Energy, Global Finance and the Labour Market', *Work Organisation, Labour & Globalisation*, I (2): 5–14.

[7]Smith, A. (1776) *An Inquiry into the Nature and Causes of the Wealth of Nations*. Accessed on August 18, 2012 from: http://www.adamsmith.org/smith/won-b1-intro.htm.

[8]Ricardo, D. (1817) *The Principles of Political Economy and Taxation*. Accessed on August 19, 2012 from: http://socserv2.socsci.mcmaster.ca/econ/ugcm/3ll3/ricardo/prin/index.html.

[9]Marx, K. (1867) *Capital*. Accessed on August 18, 2012 from: http://www.marxists.org/archive/marx/works/1867-c1.

worker as much as possible: the more specialist the division of labour, the more value could be added in each operation.

Smith described it in these terms:

> The division of labour, however, so far as it can be introduced, occasions, in every art, a proportionable increase of the productive powers of labour. The separation of different trades and employments from one another seems to have taken place in consequence of this advantage. (Smith 1776: Book 1, Chapter I)

This kind of technical division of labour means that each worker is concerned only with the tasks that he or she has to perform (in most cases the simpler and more repetitive the better, from the employer's point of view). Only the employer needs to have an overview of the whole process. Individual workers are not necessarily in a position to understand what value their own particular tasks are producing. This value is collapsed into the larger balance-sheet of the complete enterprise which can be viewed as a whole by the employer. As Smith went on to explain:

> The value which the workmen add to the materials, therefore, resolves itself … into two parts, of which the one pays their wages, the other the profits of their employer upon the whole stock of materials and wages which he advanced. He could have no interest to employ them, unless he expected from the sale of their work something more than what was sufficient to replace his stock to him; and he could have no interest to employ a great stock rather than a small one, unless his profits were to bear some proportion to the extent of his stock. (ibid.: Book 1, Chapter VI)

When the employer has had to invest a lot of money in fixed costs, such as machinery and buildings, it takes a while for this to be recovered. So it is very expensive to produce the first batch of commodities using a new technique. However the more commodities are produced, the more the cost of producing each one goes down, unlike in traditional artisanal production systems where, as already noted, the cost per item is roughly the same no matter how many are produced. This means that, even if the mass-produced goods are sold at prices that are cheap compared with traditionally crafted equivalents, the value per item on the market (its

exchange value) continues to go up in proportion to the scale of manufacture. Smith pointed out that the additional value (i.e. the exchange value of the goods minus the cost of raw materials and the fixed cost of machinery etc.) is split two ways, with one part going to the workers as wages and the other part being retained by the employer (who, in this system can be designated a capitalist) as profit.

Marx took this analysis a step further, introducing the concept of *surplus value*. He pointed out that there is a structural conflict between the worker, who wants to get as a high a price as possible for the labour power that he or she is selling to the employer, and the employer, who wants to obtain this labour power at the lowest possible price in order to maximise profit. The greater the use of machinery, and the larger the number of commodities that can be produced, the lower, proportionally speaking, is the value of any individual worker's contribution.

As Marx put it:

> The worker becomes all the poorer the more wealth he produces, the more his production increases in power and size. The worker becomes an ever cheaper commodity the more commodities he creates.[10]

This is associated with a reduction in the value of all labour.

> The **devaluation** of the world of men is in direct proportion to the **increasing value** of the world of things. Labour produces not only commodities; it produces itself and the worker as a commodity – and this at the same rate at which it produces commodities in general.[11]

Once the labour power has been sold to the employer, the products of that labour (and their value) become the property of that employer. The worker experiences that loss of ownership as *estrangement* or *alienation*.

> Labour's product [the commodity] confronts it [labour] as **something alien,** as a **power independent** of the producer. The product of labour is labour

[10]Marx, K. (1844) 'Estranged Labour', *Economic and Philosophical Manuscripts of 1844*, First Manuscript. Retrieved on June 8, 2018 from: https://www.marxists.org/archive/marx/works/1844/manuscripts/labour.htm.

[11]Ibid.

> which has been embodied in an object, which has become material: it is the **objectification** of labour. Labour's realisation is its objectification. Under these economic conditions this realisation of labour appears as **loss of realisation** for the workers; objectification as **loss of the object and bondage to it**; appropriation as **estrangement**, as **alienation**.[12]

Elsewhere, Marx contrasts this form of alienated labour with *unalienated*, or 'free' labour which, carried out for its own sake, is experienced by the worker as liberating:

> this overcoming of obstacles is in itself a liberating activity — and [that,] further, the external aims become stripped of the semblance of merely external natural urgencies, and become posited as aims which the individual himself posits — hence as self-realisation, objectification of the subject, hence real freedom, whose action is, precisely, labour.[13]

More prosaically, he recognised that most labour was not carried out for its own sake in this free way but in a context of social relationships which imply some degree of power inequality between the worker and the employer or, where the worker is an independent producer, in the market where the products of labour are bought and sold.

Nevertheless, Marx drew a sharp distinction between work that produces surplus value for capitalists, which he termed *productive labour* because the value it produces is productive for capitalism and work which he deemed *unproductive* because it produces simple use values or exchange values that accrue directly. In his view, much labour that takes place in a capitalist society is not productive because it is not paid for by capitalists and does not directly produce surplus value. For example he argued that the labour carried out by domestic servants was not productive because it was paid for from the incomes of the households where they were employed (from their wages, if their masters or mistresses happened to be employees) even if this labour involved making things that were similar to those made under capitalist conditions.

---

[12]Ibid.

[13]Marx, K. (1973) *Grundrisse*, Harmondsworth: Penguin. Retrieved on August 23, 2010 from: http://www.marxists.org/archive/marx/works/1857/grundrisse/ch12.htm#p610.

> Certain labours of menial servants may therefore equally well take the form of (potential) commodities and even of the same use-values considered as material objects. But they are not productive labour, because in fact they produce not 'commodities' but immediate 'use-values'.[14]

He illustrated this with several examples.

> An actor, for example, or even a clown, according to this definition, is a productive labourer if he works in the service of a capitalist (an entrepreneur) to whom he returns more labour than he receives from him in the form of wages; while a jobbing tailor who comes to the capitalist's house and patches his trousers for him, producing a mere use-value for him, is an unproductive labourer. The former's labour is exchanged with capital, the latter's with revenue. The former's labour produces a surplus-value; in the latter's, revenue is consumed.[15]

He gave other examples of the distinction based on various forms of creative work:

> Milton, for example …was an unproductive worker. In contrast to this, the writer who delivers hackwork for his publisher is a productive worker. Milton produced Paradise Lost in the way that a silkworm produces silk, as the expression of his own nature. Later on he sold the product for £5 and to that extent became a dealer in a commodity … A singer who sings like a bird is an unproductive worker. If she sells her singing for money, she is to that extent a wage labourer or a commodity dealer. But the same singer, when engaged by an entrepreneur who has her sing in order to make money, is a productive worker, for she directly produces capital.[16]

This distinction between 'productive' and 'unproductive' labour has been a contentious one in debates about Marxian theory. It has frequently been criticised by feminists for failing to take account of the value of unpaid

---

[14]Marx, K. (1863) *Capital*, Chapter IV. Retrieved on February 1, 2012 from: https://www.marxists.org/archive/marx/works/1863/theories-surplus-value/ch04.htm.

[15]Ibid.

[16]Marx, K. (1861–1864) 'Productive and Unproductive Labour', *Economic Manuscripts*, Chapter 2. Accessed on January 20, 2013 from: https://www.marxists.org/archive/marx/works/1864/economic/ch02b.htm.

reproductive labour. During the 1970s it was also often argued by Marxian thinkers that public sector work should be regarded as productive, even though the workers were employed directly by non-profit state organisations, because of the similarities of their working conditions and forms of management to those of private sector workers. But others, like Harry Braverman, insisted that Marx's distinction was valid:

> What counts for him [the capitalist] is not the determinate form of the labor, but whether it has been drawn into the network of capitalist social relations, whether the worker who carries it on has been transformed into a wage-worker, and whether the labor of the worker has been transformed into productive labour – that is labour which produces a profit for capital.[17]

The distinction between work that is productive for a particular capitalist and work that is not seems to me to be a useful one that we should retain. The particular form of antagonism between worker and employer under capitalism has a distinctive character that has major social and political implications, as well as enabling us to understand capitalism as a *relationship* and hence as a *system.* However it is undeniably the case that a lot of other forms of labour that currently sit outside the scope of this direct antagonistic relationship also produce value both for society as a whole and, more specifically, for capitalists. Into this category we can include both the unpaid work that reproduces workers and their labour power and makes it available to capitalists and the paid work that provides the public services, infrastructure, policing and government services that ensure the smooth functioning of capitalism, the maintenance of public order and the education and disciplining of its workforce. To these we can add the regulation of capitalism itself (for example by extracting taxes, laying down rules of governance for particular products and sectors or breaking up monopolies). I prefer to call these forms of labour 'reproductive' rather than 'unproductive' because of the roles they play in the reproduction of capitalism and of society more generally but (along with Marx) like to insist that although they may produce use value and exchange value they

[17] Braverman, H. (1974) *Labor and Monopoly Capital: The Degradation of Work in the 20th Century*, New York: Monthly Review Press: 362.

do not produce surplus value so long as they remain outside the direct scope of capitalist relations.

This is not, of course, to say that they cannot potentially be brought within capitalism's orbit at some future time. Indeed one of the most important characteristics of capitalism, constituting its most radical feature and essential to its survival as a system, is its voracious expansion, insatiably seeking out new sites of accumulation and sucking more and more aspects of human activity within its span in a process of *commodification*. However in order to comprehend the dynamics of the creative-destructive colonisation of nature and human activity involved in commodification we need a clear typology of labour that enables us to track the changes as they occur. In other words, if we want to understand the future of work we have to understand what currently lies *outside* capitalism, as well as what is already within it, so we can see what new kinds of activity can potentially be drawn within its reach (allowing it to continue expanding) and how work can thereby be transformed. This in turn enables us to make a start on analysing the implications of these transformations for daily life. Only when we have done this will it be possible to envisage the economic, social and political implications of these changes and develop strategies for dealing with them.

The typology that I have developed,[18] summarised in Table 2.1, classifies labour according to two different variables. First, it distinguishes between labour that is unpaid and labour that is paid. And second, it distinguishes between the labour that is outside capitalism (even though it may be producing values that are useful for capitalism as a whole) and labour that is directly involved in the antagonistic relationship that constitutes capitalism that Marx called 'productive'. In other words it makes a distinction between what Marx would have called 'unproductive' (and I prefer to call 'reproductive') labour on the one hand and what we both call 'productive' labour, meaning that it is productive for capitalists, on the other. The movement between these different categories is highly dynamic. Not only is unpaid work transformed into paid work, and vice versa, but major shifts are set in motion between different categories of paid work

[18]Initially published in Huws, U. (2014), 'The Underpinnings of Class in the Digital Age: Living, Labour and Value', *Socialist Register*, 50: 80–107 and subsequently developed further elsewhere.

each time capitalism reinvents itself, with technology playing a major role in many of these changes.

These transformations will be discussed and illustrated in greater detail in later chapters. Here I briefly introduce the typology in order establish a basic vocabulary for discussing them.

1. Subsistence labour
   The first of these categories refers to the kind of unpaid labour that takes place outside the scope of the money economy, producing only use values. Some of this labour, such as that carried out by hunter-gatherers or in subsistence agriculture, predates capitalism by many centuries. But many forms have persisted in the capitalist era. These do not just involve activities related to physical reproduction and family maintenance (bodily care of the self and others, preparing food, cleaning etc.) but also social and cultural production and reproduction (teaching children to speak, singing, passing on stories, adornment etc.). The fact that this labour is unpaid does not, of course, necessarily imply that is entirely voluntary. It may be carried out unwillingly, within coercive social relationships, and with strong sanctions for those who transgress social and cultural norms. But of course it may equally be a source of joy. In other words, to use Marx's language, this kind of labour may be regarded as unalienated. It sits firmly outside capitalist relations.
2. Servant labour
   The second type of labour, which also predates capitalism, but continues to exist alongside it, is work carried out by paid servants, which, Marx insisted, is *not* productive of surplus value when carried out directly for the household but is transformed into productive labour when supplied by a capitalist intermediary who takes a profit from the provision of this service provision rather than being supplied directly to the end user by the (temporary or permanent) servant.
3. Capitalist service work
   The third category of labour consists of service work that has made this transition and is supplied to customers by workers employed by service companies, for example shops, restaurants, hotels, transport companies, security companies, cleaning companies or private schools. Unlike the first two categories, this type of labour is 'productive' for capitalism.

Table 2.1 A typology of labour

		Unpaid	Paid	Reproductive labour	Productive labour
1	Reproductive work carried out beyond the scope of capitalism: **subsistence labour**	Yes		Yes	
2	Service work carried out directly for an individual or household: **servant labour**		Yes	Yes	
3	Work for private service companies: **capitalist service work**		Yes		Yes
4	Work in public services or other non-profit organisations for public good: **public service work**		Yes	Yes	
5	Work in production industries: **capitalist production work**		Yes		Yes
6	Unpaid labour involved in externalised tasks connected with the consumption of goods or services: **consumption work**	Yes		Indirectly productive—by increasing productivity of paid workers but does not directly produce surplus value	

Source Author

4. Public service work
   The fourth type of labour, like the first two, is also labour that is dedicated to the provision of services, in this case public services, a category that grew dramatically in the twentieth century. Although it involves the provision of use values directly to the population or the state, this type of service labour is not 'productive' for capital. This is not to say, of course, that it does not indirectly benefit capitalism, for example by providing infrastructure, policing the population or contributing to the reproduction of labour power. It is therefore, like the first two categories, what Marx would have termed 'unproductive' and what I would prefer to call 'reproductive' labour.
5. Capitalist production work
   The fifth category is the one to which Marx and his followers paid most attention: labour involved in the production of commodities for the market. This category—which Marx expected to continue growing under capitalism—places workers into a directly conflictual relationship with capital (a relationship which also applies in the case of our third category) with capitalists seeking to appropriate as large as possible a share of the value of workers' labour as surplus value. In this process capitalists use every means available to them for cheapening the value of labour and/or increasing its productivity, including deploying members of the reserve army of labour to substitute for organised workers, and introducing machinery that simplifies tasks and deskills workers in ways that will be discussed more fully in later chapters of this book.
6. Consumption work
   My final category is one that has received rather little attention in Marxian theory but, I argue, plays an important role in facilitating both the transformation of 'unproductive' (or 'reproductive') labour into 'productive' labour and in intensifying the exploitation of 'productive' workers. This is the unpaid labour carried out by consumers associated with the purchase, operation, maintenance and transportation of commodities purchased in the market that, following Batya

> Weinbaum and Amy Bridges,[19] I call 'consumption work'.[20] Many of the now unpaid tasks involved in this consumption labour involve activities that were previously carried out by paid 'productive' workers that have been transformed into unpaid labour in a process of externalisation, often assisted by technology. These include such things as self-service in supermarkets, the purchase of tickets online or the use of ATM machines to withdraw cash from a bank.[21]

It must be emphasised that this typology refers to types of *labour* not types of *worker*. The same person may well be involved in performing several of these types of labour simultaneously. In fact most people perform both types of unpaid work (subsistence labour and consumption work) on a daily basis, as well as at least one of the others, at different stages in their lives. It should also be stressed that the same tasks may be implicated in more than one type of labour. For example changing a baby's nappy may be carried out by a family member or friend, unpaid (subsistence labour) or by a privately-paid nanny (servant labour) or by an employee in a private nursery (capitalist service work) or an employee in a state nursery (public service work). Work in a nappy factory would be classed as capitalist production work, while operating the automatic self-service check-out machine in the supermarket while purchasing these manufactured nappies and lugging them home is consumption work. Any of these might be defined as 'shit jobs' but each type is shitty in its own unique way when it comes to its relationship with capitalist value production.

[19]Weinbaum, B. & A. Bridges (1976) 'The Other Side of the Paycheck: Monopoly Capital and the Structure of Consumption', *Monthly Review*, 28 (3), July–August.

[20]I first introduced this concept in Huws, U. (1982) 'Domestic Technology: Liberator or Enslaver?', *Scarlet Women*, 14. Reprinted in Kanter, H., S. Lefanu & S. Spedding (eds.) (1984) *Sweeping Statements: Writings from the Women's Liberation Movement 1981–1983*, London: The Women's Press.

[21]This is discussed more fully in Chapter 11 ('Who's Waiting? The Contestation of Time') in Huws, Ursula (2003) *The Making of a Cybertariat: Virtual Work in a Real World*, Monthly Review Press.

3

The Dynamics of Capitalist Development

In struggling to come to terms with the aftermath of the crisis of 2008, capitalism has, after several decades in which even the use of the term seemed quaintly old-fashioned, again become a topic of general discussion, and there has been a resurgence of interest in Marxian theory, especially among generations too young to remember the debates of the 1960s and 1970s. These generations have grown up in a world that has been much more dominated by capitalism than their parents and grandparents could have imagined. A 2010 study found that three-year-olds were already familiar with brands such as Disney, McDonald's, My Little Pony and even Toyota, with 30% of three-to-five-year-olds able to use their knowledge of brands to make value judgements about people who used these brands.[1] Global corporations are encountered everywhere: in the supermarket, on the street, in the playground and in the holiday resort as well as on screens, large and small and, of course, in the workplace. They mediate so many aspects of our lives, from the ways we communicate to the water we drink, that it is hard to think of capitalism as anything other than a vast amorphous all-encompassing entity that sucks in our labour while it spews

[1] McAlister, A. R. & T. B. Cornwell (2010) 'Children's Brand Symbolism Understanding: Links to Theory of Mind and Executive Functioning', *Psychology & Marketing*, 27 (3): 203–228.

U. Huws, *Labour in Contemporary Capitalism*, Dynamics of Virtual Work,
https://doi.org/10.1057/978-1-137-52042-5_3

out the commodities that we consume, polluting the planet as it does so, as inescapable as the air we breathe.

Such a conception of capitalism makes it extraordinarily difficult to analyse. If it seems not to have boundaries, then how can we visualise what lies inside and what outside its scope? If all its parts seem seamlessly interconnected, then how can we understand its dynamics? By what mechanisms do its separate parts interconnect, help each other move or, perhaps, impede each other's operations?

As noted in the last chapter, it is useful to regard capitalism as a *system* and it is moreover feasible to regard this system as strongly integrated—not least by the money (*capital*) that can so easily be switched from one corporation to another through the world's stock exchanges. Nevertheless, and following Marx, it seems useful to take a step back from this and remind ourselves that capitalism is not a single homogenous entity. On the contrary, it is made up of a number of different capitalists fiercely competing with each other. The dynamics of this competition are nevertheless difficult to unravel. Not only is there a lot of cross-ownership of different capitalist enterprises, but they are also intertangled with each other in a number of other ways, for example through joint partnerships, outsourcing contracts, dealerships, franchises, agreements to share intellectual property and licensing arrangements. They may also collaborate with each other at one level (e.g. for the purposes of lobbying governments or setting up employers' associations) while competing at others. Furthermore, their inter-relationships are in a state of constant flux, with frequent mergers, demergers and takeovers, and restructuring processes within corporations whereby departments are floated off to form new companies or, alternatively, reintegrated to create larger units. To make matters even more complicated, many global corporations also have complex and shifting arrangements (including public-private partnerships and joint ventures) with national governments, adding another dimension to the difficulty of delineating the boundaries of any given corporate unit so that we can analyse its competitive relationship with others.

Why is it so important to understand the current boundaries of capitalism and anatomise its workings? This matters because unless we can understand which particular component of capitalism (which specific capitalist) any given group of workers is producing value for, and where that

labour fits into its overall value generation process, it is impossible for workers to understand the relationship of their labour to capitalism: are they directly producing surplus value or not? And if so, for which branch of which company? Without such an understanding, it is difficult to identify the other workers with whom they could be making common cause and the power they might collectively have to negotiate changes in their conditions. Under normal circumstances, workers can only negotiate with specific capitalists or groups of capitalists. Trying to gain a grip on an amorphous, boundless entity called 'global capitalism' is like trying to take a forensic needle to a giant jellyfish: futile without a specific target point. Nevertheless, it is no easy task to anatomise the vast, complex, fast-changing and interconnected system of collaborating-competing entities that constitutes capitalism and, later in this chapter, I use a number of real-world examples to try to illustrate this point, albeit in the knowledge that by the time this book is published many of their details will already be out of date.

I do so in the belief that we cannot understand what capitalism is and how it works without some sense of what drives these restless dynamics of restructuring. To do this, we need, so to speak, to take it apart, like a clock, to see how it works, and which parts belong to it and which do not. This involves looking, step by step, not only at how commodities are produced, and the relationships between the different capitalists involved in their production, but also at how these commodities are distributed, and the patterns of control and competition that shape these production and distribution processes as each capitalist entity manoeuvres for its own advantage. In pursuit of this endeavour it is useful to bring together several key concepts.

The first of these is that of the *value chain*,[2] a concept that is linked to that of the *division of labour*, discussed in the last chapter, and that can be traced back to Adam Smith. Using a logic that seeks to maximise the value that can be extracted from any given unit of labour, tasks are broken

[2]This is not an entirely satisfactory term. I have written elsewhere (e.g. in Huws [2013] *Labor in the Global Digital Economy: The Cybertariat Comes of Age*, New York: Monthly Review Press), about the relative merits of using the terms 'value chain', 'network' and '*filière*' for describing the ways in which companies break down their business processes into smaller units or modules that can be recombined in multiple contractual and spatial configurations like lego bricks. I use it here because it is in the most generally used term in the English-language literature.

down into processes that are as simplified and standardised as possible. Standardised processes typically require a narrow range of skills that can be learned easily. They also usually produce results that are easily counted. This makes it possible to have them carried out in different places and by different groups of workers, which in turn makes it possible to outsource them to a different company or locate them in a geographically remote site. Digitalisation has greatly multiplied the possibilities for different kinds of outsourcing and relocation both by increasing the amount of work content that can be transmitted over distance and by making it possible to manage processes remotely and co-ordinate logistics on a just-in-time basis. The more complex the product or service, the greater are the options for distributing its assembly across a global workforce, with each group of workers producing a separate component of the final composition of the product, and thus contributing a specific portion of its value, in a process that is co-ordinated globally.

This is where it is useful to delve more closely and consider another concept: that of *value* and its creation and realisation. It is often assumed that in the Internet era, when purchases are made instantaneously online, that the creation of value and the realisation of that value happen simultaneously. In fact, nothing could be further from the truth. The longer the value chain, the greater the gap between the creation of value and its realisation. Let us imagine a typical complex twenty-first century product such as a smartphone. Manufacturing it and bringing it to the customer involves the labour of a vast number of workers, both manual and non-manual. The manual workers include miners in Africa, China and Latin America who extract the raw materials, assembly workers in many factories around the world producing components, truck drivers, train drivers, dockers, seafarers on container ships, warehouse workers and delivery workers. The non-manual workers range from software engineers to call centre workers, from logistics managers to data entry staff in finance centres. All these workers, of course, have to be paid. But the capitalist only gets this money back if and when customers actually buy the products these workers have collectively made.

The capitalist is thus taking a *risk*: the risk that the value which has been extracted from all those workers might never be realised through the sale of the commodities they have made, at a price that exceeds their combined

wages plus the other costs, such as those that have been expended for raw materials. In an era of fierce global competition and rapid obsolescence this risk is heightened. In the case of the smartphone it could be, for example, that a new innovation makes a model obsolete more quickly than anticipated, that a competitor brings out a better model, that a container ship is slowed down so that the goods cannot be brought to market in time for the high-sales season, that a component (such as an overheating battery) turns out to be faulty, requiring products to be withdrawn, that there is a change in government regulation or simply a change in fashion. Any of these could mean a failure to realise the value that the company has invested in. To reduce this risk as much as possible, *speed to market* acquires overriding importance.

The failure of one company is not, of course, a failure for capitalism as a whole, but it is necessary to understand the nature of the risks taken by individual companies to understand the overall dynamics of how capitalism develops and changes and, in particular, how it generates such a high degree of instability and unpredictability, with innovation and creativity by some capitalists generating obsolescence for others, leading, at the aggregate level, to the formation, destruction and recomposition of sectors, organisations, labour processes and skills at a dizzying speed, driven by the imperative of maximising profit: which means not only the extraction of the greatest possible value from any given unit of labour but also its realisation by ensuring that the commodities produced are actually purchased before their value has dissipated. As the physical distances that have to be bridged in order to bring these commodities to market become longer and with more numerous steps, the risk, and with it the need for speed, becomes ever greater. And this means that capitalists have an ever-growing interest in being able to control the distribution process as much as possible and bring pressure to bear to protect their routes to market, whether physical or virtual. Ensuring that global trade routes and global communications channels remain open and can function as efficiently as possible involves negotiations not only between capitalists in different sectors (for instance between those involved in manufacturing and those involved in shipping, road-building, port management and laying telecommunications cables) but also with a range of government bodies.

There are many different stakeholders with an interest in maintaining the smooth flows of commodities around the world.

One of the most striking, but least visible, features of the Internet Age has been the rapidity with which the virtual and the real have been knitted together in the circuitry of global markets, using processes that compress and decompress space and time like the air inside an accordion.[3] In doing so, they do not just consolidate control of markets in the hands of a relatively small number of global players, they also accentuate the competition between them. The global markets that are currently reaching maturity rest not only on global divisions of labour (geographically dispersed, though centrally managed) but also on global systems of communication and distribution. These in turn rest on infrastructures that are increasingly interconnected, both with each other and with the value chains of the commodity producers.

As the interfaces become more fluid between the ordering, manufacturing and delivery of goods and services (between production and consumption more broadly) the boundaries shift between the firms supplying these functions, and the competition between them intensifies, each encroaching on the territory of its neighbours, resulting in tectonic sectoral shifts. Manufacturers become retailers which become wholesalers which become shipping companies. Telecommunications companies morph into broadcasters which in turn gobble up publishers. Toy companies merge with software companies to produce online games featuring characters developed by movie companies. Brands (whose owners might manufacture nothing directly themselves) attach themselves to everything from shoes to clothes to bags to jewellery to perfume. Underlying these dynamic shifts is a cold logic of consolidation in which the processes carried out online (advertising, ordering, customer service and management of the elaborated value chains by which commodities are produced and distributed and the co-ordination of all these interconnected functions) are increasingly integrated with the physical circuits of goods: the transport of materials across land and ocean from mine to refinery to factory to assembly plant to depot to warehouse to the supermarket or directly to the home of the consumer.

[3]For a fuller discussion of time-space compression, see David Harvey's (1990) 'ground-breaking' *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change*, Cambridge, MA: Blackwell.

This creates an imperative for global corporations to maximise their access to and control of the infrastructure—whether this involves the telecommunications networks used for online communication or the physical infrastructure (and preferably both)—so that goods can reach their markets as quickly and cheaply and frictionlessly as possible. And this in turn pushes capitalist corporations into economic areas previously controlled by the state. The rapid evolution and integration of global value chains under the control of capitalist organisations is perhaps best illustrated with some concrete examples.

During most of the twentieth century, much of the transport infrastructure was owned and maintained by national governments: postal and telecommunications services, seaports, airports, roads and railways, giving national governments the power to set standards, charges and terms of use and to monitor traffic across frontiers. The first big sell-offs to the private sector, starting in the 1980s, were of telecommunications and of airports, in a process begun by the UK Thatcher Government (which privatised both British Telecom and the British Airports Authority in 1984). This was followed in Europe by the privatisation of telecommunications and of postal services and the 'demonopolisation' of rail networks. By the end of 2010, 22% of Europe's 404 main airports were either wholly investor-owned or managed via public-private partnerships.[4] What happened in Europe took place in a more piecemeal way across the rest of the world, pushed by various policies adopted by the International Telecommunications Union (founded in 1992) and the World Trade Organisation.[5] Many of these formerly state-owned services became major global corporations in their own right, with over 20 featuring repeatedly among the top 100 companies listed in the UNCTAD World Investment Report from 1996 to 2006.[6] Increasingly, however, their sectoral identities as universal service providers have become blurred as they move into other activities.

[4]National Center for Policy Analysis (2014) *Air Transportation Privatization*, 4 April. Accessed on June 9, 2014 from: http://www.ncpa.org/sub/dpd/index.php?Article_ID=24280.

[5]For a fuller discussion, see Huws (2012) 'Crisis as Capitalist Opportunity: New Accumulation Through Public Service Commodification', *Socialist Register*, 64–84.

[6]Clifton & Diaz-Fuentes (2008) 'The New Public Service Transnationals: Consequences for Labour', *Work Organisation, Labour & Globalisation*, 2 (2): 23–39.

Simultaneously, their traditional terrain has been targeted aggressively by companies from other sectors. Amazon, for instance, formed partnerships with US Postal Services in several US states to provide Sunday deliveries of goods to its customers in 2013.[7] This was followed by the development of a range of delivery services provided directly by the company, including Amazon Prime Now, Amazon Fresh and Amazon Go. Meanwhile Google established both Google Express and Google Shopping. Google Shopping now has 16% of the US online shopping market, making it a significant competitor with Amazon. Google Express works in partnership with major retailers such as Walmart, Target, and Costco to provide home delivery services.[8]

Amazon's strategy, sometimes described as its 'Flywheel of Growth'[9] is based on maximising the selection of products, using scale to lower the cost of goods, and accepting very small profit margins in order to do so. This logic extends beyond its role as a retailer to its role as a producer of hardware (for example the Kindle, Fire phone or Echo). Jeff Bezos, Amazon's founder, has been quoted as saying that 'We sell our hardware near break-even, so we make money when people USE the device, not when they BUY the device'.[10] This strategy depends crucially on getting the goods to customers as speedily as possible, which in turn requires tight supply chain management—'planning and co-ordinating the materials flow from source to user as an integrated system' as one expert puts it.[11] Amazon also takes advantage of its monopsonistic position by aggressively putting pressure on its suppliers to reduce their prices, including, in 2014, using sanctions such as refusing to accept pre-orders for e-book titles from

[7] Greenfield, J. (2013) 'Amazon Partners with U.S. Post Office to Deliver Packages on Sunday', *Forbes*, 11 November. Accessed on June 9, 2014 from: http://www.forbes.com/sites/.

[8] Meagher, K. (2018) 'What Is the Difference Between Google Express and Google Shopping?', *Acquisio*, 3 May. Accessed on August 8, 2018 from: https://www.acquisio.com/blog/agency/difference-between-google-express-google-shopping/.

[9] See, for example, Kirby, J. & T. A. Stewart (2007) 'The Institutional Yes: An Interview with Jeff Bezos', *Harvard Business Review Magazine*, October. Accessed on June 10, 2014 from: http://hbr.org/2007/10/theinstitutional-yes/ar/1.

[10] Hof, R. (2012) 'Jeff Bezos: How Amazon Web Services Is Just Like the Kindle Business', *Forbes*, 29 November. Accessed on June 10, 2014 from: http://www.forbes.com/sites/roberthof/2012/11/29/jeff-bezos-how-amazon-web-services-is-just-like-the-kindle-business/.

[11] Christopher, M. (2013) *Logistics and Supply Chain Management*, Harlow: Pearson: 6.

Hachette and videos from Warner Brothers, until these companies agreed a price deal more favourable to Amazon[12] (Rushe 2014).

In Amazon's case, as with offline supermarkets such as Walmart, Tesco and Carrefour, control of the supply chain has been tipped in favour of the buyer, rather than the producer. In an apparent paradox, this control becomes tighter even as supply chains get longer through additional levels of outsourcing. With the manufacture of very similar products increasingly dispersed, and the growing importance of the supply chain, it has been argued that we are moving into an era where competition takes place not between companies but between supply chains, a competition that is exacerbated in a context of shortening product life cycles. As Christopher notes: 'There are already situations arising where … the life of a product on the market is less than the time it takes to design, procure, manufacture and distribute that same product! … the means of achieving success in such markets is to accelerate movement through the supply chain'.[13] The Amazon-type model, in which distribution is directly controlled by the retailer, is not, however, the only one. According to industry analysts, the majority of large companies outsource their logistics and supply chain functions to third party logistics (3PL) companies, with 86% of US Fortune 500 companies reported as doing so in 2012.[14] These 3PL companies, alongside shipping companies, rail companies, and some production companies, jostle for position with the retailers and ecommerce companies for control of their section of the supply chain, with many attempting to extend into neighbouring functions: by ousting their neighbours along the chain, by entering into strategic alliances with them, or bypassing them by using alternative routes and means. There are therefore a number of competing corporate players vying for control of logistics, but sharing the common goal of shortening the time to market as much as possible (in other words, reducing risk by realising the value generated by workers as quickly as possible).

---

[12]Rushe, D. (2014) 'Amazon Pulls Warner Bros Movies from Sales as Trade Dispute Expands', *Guardian*, 11 June. Accessed on June 12, 2014 from: http://www.theguardian.com/technology/2014/jun/11/amazon-warner-bros-price-hachette-lego-movie.

[13]Christopher, M. (2013) *Logistics and Supply Chain Management*, Harlow: Pearson: 12.

[14]Armstrong and Associates (2013) 'Eighty Six Percent of the Fortune 500 Use 3PLs as Global Market', *MHI*, 12 July. Accessed on June 11, 2014 from: http://www.mhi.org/media/news/12685.

Overtaking these US-based corporations in their control of global supply chains are others, based elsewhere, especially China. Alibaba Holdings, for example, a China-based multinational company providing e-commerce, Internet, AI and technology, is one of the top ten most valuable companies in the world. With operations in over 200 countries in 2016, its online sales surpassed those of Walmart, Amazon, and eBay combined.[15] Similarly, China-based COSCO Shipping Holdings was the fourth largest container ship company in the world in 2018, with a 9% share of the market, with its shipping volume growing twice as fast as the global industry average.[16] COSCO also owns substantial chunks of the world's transport infrastructure, having, for example, purchased a majority (85%) share in the Greek port of Piraeus in 2011—a key entry point into European markets from the East.[17] Indeed, one of the most interesting development of the twenty-first century has been the Chinese state's aggressive pursuit of control of global infrastructure via its 'new silk road' (or 'Belt and Road' Initiative) strategy.[18]

In this intermeshing of production and distribution, many different kinds of labour are involved, most of it falling into two broad categories: first, there is a wide variety of manual work involved in the physical production of goods (including the extraction of raw materials), in the logistics of handling them and in the construction and maintenance of infrastructure; second there is also a lot of non-manual 'virtual' work (work that involves the processing of digitalised information that can be carried out at a distance using telecommunications links) involved in such activities as design, communications and the general management of production and the supply chain as well as purchasing, sales, finance and customer service. The impact of this cut-throat race on these many varieties of labour,

[15] Hanley, K. (2018) 'Amazon and Alibaba Compete for Global Market Dominance', *Digital Journal*, 5 March. Accessed on August 8, 2018 from: http://www.digitaljournal.com/business/amazon-and-alibaba-compete-for-global-market-dominance/article/516532.

[16] Png, C. (2018) 'COSCO SHIPPING Holdings Gains Market Share and Cost Efficiency in 1Q18', *Crucial Perspective*, 2 May. Accessed on August 8, 2018 from: https://crucialperspective.com/cosco-shipping-holdings-1q18-briefing-takeaways/.

[17] Huws, U., P. Hatzopoulos & N. Kambouri (2014) 'The Containment of Labour in Accelerated Global Supply Chains: The Case of Piraeus Port', *Work Organisation, Labour and Globalisation* 8 (1): 5–21.

[18] See, for example, Lim, T. W., H. Chan, K. Tseng & W. X. Lim (2014) *China's One Belt One Road Initiative*, London: Imperial College Press.

while different in its detail, is broadly similar. They are caught in a squeeze exerted by two strong tendencies. The first of these tendencies is the result of the inexorable pursuit of the lowest possible unit cost of labour. This is achieved by the simplification, standardisation and fragmentation of tasks, and their distribution to the cheapest possible workers, including the use of automation to maximise the productivity of any given worker. This in turn renders workers more easily substitutable for each other, reducing their bargaining power and making it easier for the work to be carried out by a different group of workers or in a different location. The second tendency is the result of the constantly accelerating drive to speed up, leading to relentless pressure on workers to work as quickly as possible, often using sophisticated algorithms to shave microseconds off the time required to complete any given task and ratcheting up productivity targets to the limits of human endurance.

The combination of these two tendencies creates the conditions for a form of work organisation in which workers are increasingly likely to be carrying out repetitive tasks under tight management, with requirements to meet punishingly high performance targets, often monitored remotely by digital means. Of course they do not always accept these conditions passively and the dynamics of restructuring and resistance are complex. Indeed, since capitalism cannot exist without the value produced by labour, such conflicted relationships are precisely part of its nature. Later chapters in this book explore some of the dynamics of these relationships as they are played out in the twenty-first century global economy.

The intense competition between existing capitalist companies, described above, has several effects, including speeding up obsolescence and exerting constant downward pressure on prices. No sooner does one company develop a new product than another copies it, producing something similar at a lower price. So sharp limits are placed on the extent to which a company can increase its profitability just by putting up prices. And, as described in the last chapter, the larger the number of similar commodities that are produced, the lower the unit cost (an advantage that can be exploited by undercutting competitors, further limiting this possibility). One company might be able to raise productivity by using new machinery. But machinery and other means of production have to be bought at the market value. The extra value that is generated from them is

only achieved by the workers who operate those machines, and, again, any advantage is temporary. Once competitors have caught up and invested in similar machines (or even better ones) the race is on again; the only possibility for squeezing out more profit from production when prices are falling is to exploit workers even harder. This illustrates an important characteristic of capitalism, noted by Adam Smith and Karl Marx as well as many other economists who have written since: *the tendency of the rate of profit to fall.* What this means in practice is that capitalism, in order to survive, has to keep growing. One of its essential features is a voracious and insatiable appetite for growth. In order to do so it has to find new fields of accumulation, in which new commodities can be generated and new kinds of value created. This brings us to another crucial concept: that of *commodification.*

Commodification can be seen as a kind of colonisation by capitalism of areas of nature or of life that previously lay outside its remit. Just a few examples of commodification are the collection and processing of biological material, such as DNA, to create 'bio-objects',[19] the appropriation of natural water sources for sale by private companies, the use of the oceans for fish farming, new drugs and cosmetic medical procedures, the annexation of traditional forms of art and culture for commercial use and incursions into communications and sociality such as those by telecommunications companies and social media platforms that profit from our online activities.[20]

As capitalism conquers these new territories and new kinds of commodities are produced, new workers are drawn within its scope and subjected to its discipline, creating new value in the process. The ever-expanding reservoir which is in danger of drying up through the falling rate of profit is once again replenished—but not for long. It is in the nature of capitalism that the pattern will continue, at an ever-increasing scale until some as-yet-unforeseen circumstance brings it to halt. Might the planet run out of raw materials for all this production of all these new physical

[19]Vermeulen, N., S. Tamminen & A. Webster (2012) *Bio-Objects: Life in the 21st Century (Theory, Technology and Society)*, London: Routledge.

[20]These and other forms of commodification are discussed in greater depth in Huws, U. (2013) *Labor in the Global Digital Economy: The Cybertariat Comes of Age*, New York: Monthly Review Press.

commodities? Or might it be stopped in its tracks by a lack of places to dump the detritus once their value to the capitalists has been realised? Might markets become saturated? Might wars decimate the infrastructure and means of production, giving capitalism a new lease of life in their reconstruction? Might populations fall sharply enough to make it difficult to find new sources of cheap labour and thus bring the system grinding to a halt? Might workers and consumers organise successfully to develop alternative systems? Or simply find a way collectively to say 'No!'?

If there is one lesson to be learned from analysing the dynamics of capitalist restructuring it is this: that if workers want to develop strategies for resisting, negotiating with, taming or even bringing down capitalism, their best starting point may well be the spot where they are currently placed: in a specific relation to a specific capitalist in a specific location where, if they understand precisely what value they are contributing, they may be in a position to exert pressure to prevent some or all of that value from being realised by the capitalist. This is not to say that other forms of more generalised political pressure are not also important. But ignoring the specific relationship of labour to capital in the production of value serves only to weaken labour. The next chapter looks in more depth at the history of this conflictual relationship.

Later in this book I will look at some of the new forms of labour that are emerging in the current wave of commodification to shed some light on the process by which new working classes emerge. Understanding what these new workforces will look like is important because our future will be in their hands.

4

Combination, Inclusion and Exclusion: Contradictory Forces in Worker Organisation Under Capitalism

As Marx observed, the very act of setting up a capitalist enterprise brings workers together. In the eighteenth and nineteenth centuries this was often under one roof—that of the factory. Gathered together under a common disciplinary regime to carry out similar tasks, and with a realisation that they shared the same labour processes and had a common exploiter, it was not long before workers employed by capitalists began to combine with each other. Workers' organisation were not new; they could be traced back at least to mediaeval guilds and journeymen's associations, but these lacked a generally adversarial character, not least because apprentices could mostly look forward one day to being masters themselves. Their concerns were more to protect their membership from being diluted or undermined by outsiders and retain the special status of their skills (often guarded by oaths of secrecy) than to push for collective improvements.[1] The new forms of combination that emerged between around 1780 and the 1830s in Great Britain, chronicled by E. P. Thompson in his 1963 *Making of the English Working Class*,[2] were distinctively different. These early trade

[1] Black, A. (2017) *Guild and State: European Political Thought from the Twelfth Century to the Present*, London: Transaction Publishers.

[2] Published in New York by Vintage Books.

U. Huws, *Labour in Contemporary Capitalism*, Dynamics of Virtual Work,
https://doi.org/10.1057/978-1-137-52042-5_4

unions are deserving of some attention because they exhibit on the one hand the ways in which each form of worker organisation is rooted in its particular time and place and is shaped by these specific conditions socially and culturally, as well as by the economic context. On the other hand, however, they show some common patterns which seem characteristic of capitalism in general and can help to provide new insights into other new forms of labour organisation as they emerge.

The new character of workers' organisations during this period and its connection to capitalist forms of work organisation, seems clear. As Thompson put it:

> However different their judgements of value, conservative, radical, and socialist observers suggested the same equation: steam power and the cotton-mill = new working class. The physical instruments of production were seen as giving rise in a direct and more-or-less compulsive way to new social relationships, institutions, and cultural modes. (Thompson, op. cit.: 191)

He went on to say that

> [t]he outstanding fact of the period between 1790 and 1830 is the formation of "the working class". This is revealed, first, in the growth of class-consciousness: the consciousness of an identity of interests as between all these diverse groups of working people and as against the interests of other classes. And, second, in the growth of corresponding forms of political and industrial organisation. By 1832 there were strongly-based and self-conscious working-class institutions – trade unions, friendly societies, educational and religious movements, political organisations, periodicals, working-class intellectual traditions, working-class community-patterns, and a working-class structure of feeling. (Thompson, op. cit.: 194)

He explained this by reference to the spread of capitalist forms of work organisation:

> …from 1800 onwards, the tendency is widespread for small masters to give way to larger employers (whether manufacturers or middlemen) and for the majority of weavers, stockingers or nail-makers to become wage-earning outworkers with more or less precarious employment. In the mills and in

> many mining areas these are the years of the employment of children (and of women underground); and the large-scale enterprises, the factory-system with its new discipline, the mill communities – where the manufacturer not only made riches out of the labour of the "hands" but could be **seen** to make riches in one generation – all contributed to the transparency of the process of exploitation and to the social and cultural cohesion of the exploited.
>
> We can now see something of the truly catastrophic nature of the industrial revolution; as well as some of the reasons why the English working class took form in these years. The people were subjected simultaneously to an intensification of two intolerable forms of relationship: those of economic exploitation and of political oppression. (Thompson, op. cit.: 198–199)

After a detailed analysis of the testimonies of workers and contemporary witnesses, he summarises the grievances of working people as follows:

> the rise of a master-class without traditional authority or obligations: the growing distance between master and man: the transparency of the exploitation at the source of their new wealth and power, the loss of status and above all of independence for the worker, his reduction to total dependence on the master's instruments of production: the partiality of the law: the disruption of the traditional family economy: the discipline, monotony, hours and conditions of work; loss of leisure and amenities; the reduction of the man to the status of an "instrument". …
>
> The exploitive relationship is more than the sum of grievances and mutual antagonisms. It is a relationship which can be seen to take distinct forms in different historical contexts, forms which are related to corresponding forms of ownership and state power. The classic exploitive relationship of the Industrial Revolution is depersonalised, in the sense that no lingering obligations of mutuality – of paternalism or deference, or of the interests of "the Trade" –are admitted. There is no whisper of the "just" price, or for a wage justified in relation to social or moral sanctions, as opposed to the operation of free market forces. Antagonism is accepted as intrinsic to the relations of production. Managerial or supervisory functions demand the repression of all attributes except those which further the expropriation of the maximum surplus value from labour. This is the political economy which Marx anatomised in **Das Kapital.** The worker has become an "instrument", or an entry among other items of cost. (Thompson, op. cit.: 202–203)

The introduction of capitalist methods, then, produced a sharply adversarial relationship between workers and the capitalists who employed them. However even if it produced a generalised consciousness based on an 'us (the workers) versus them (the employers)' conflict and led workers to combine with each other in an attempt to protect their common interests, the organisations that were created were by no means inclusive or representative of the working class as a whole.

Indeed, the very logic of capitalism pushes in the opposite direction. The first workers to be engaged by capitalists are likely to be employed on the basis of their skills and experience. As the tasks they do are simplified and standardised, the employer is likely to seek less-skilled workers to substitute for them, who can be paid lower wages and are less likely to insist on traditional protections. Meanwhile, the most obvious basis on which workers can unite to resist the downgrading of their pay and working conditions is on the basis of their common skills, and the traditional occupational identities that accompany them. The organisations they form on the basis of these solidarities are therefore inclusive, in the sense that they bind together the 'insiders' in these occupations, but exclusive in that they seek to avoid dilution by less-skilled 'outsider' workers.

During the Industrial Revolution, as Thompson described it:

> Where a skill was involved, the artisan was as much concerned with maintaining his status as against the unskilled man as he was in bringing pressure upon the employers. Trade unions which attempted to cater for both the skilled and the unskilled in the same trade are rare before 1830. (Thompson, op. cit.: 244)

Thompson describes case after case in which workers exercised their militancy in order to protect their skills (by excluding unskilled workers), often with success over the short term, but with a tendency for a strong bargaining position based on exclusively protected skills to be eroded over time. He describes the case of skilled engineers in the textile machinery industry who were in such strong demand in 1824 that employers scoured Europe to recruit them but who, by 1851 were so plentiful that the employers could afford to pick and choose only the best.[3] Similarly the

[3] Op. cit.: 246–247.

London tailors were able to combine successfully for many years to exclude cheaper labour but during the 1830s, despite a strike in 1834 estimated to have involved some 20,000 workers, found themselves defeated by a large incursion of non-union, less-skilled labour so that by 1849 labour conditions had declined to such an extent that tailoring was regarded as a 'sweated trade'.[4]

The pressure from employers to break up the solidarities among workers was relentless. To quote Thompson yet again: 'Manufacturers in the first half of the 19th century pressed forward each innovation which enabled them to dispense with adult male craftsmen and to replace them with women or juvenile labour'.[5]

Marx's term for the reservoir of cheap labour that capitalists draw on to substitute for skilled, organised workers is the *reserve army.* The existence of this reserve army creates a contradiction for labour organisation. The protection of existing groups of skilled workers dictates a logic of creating closed groups, to which admission is only granted to new members if they meet certain criteria (for example having completed an apprenticeship, possessing a formally recognised qualification, having sworn to keep the secrets of the trade or having paid certain dues). The wellbeing of this group is thus based on the exclusion of other workers. It is also based on a clear delineation which distinguishes the group from other closed groups, made up of workers with different skills or from other traditions. To the extent that these bounded group identities give them bargaining power with the employers, these groups, in the aggregate, constitute the collective strength of the working class. Their power to withdraw their labour represents the strongest weapon for countering the power of capital. Yet in order to protect this privileged position they have to exclude other sections of this same working class. And history suggests that sooner or later (often as a result of the state stepping in to support capitalists and deploying violence against them) a chink will be opened in their defences through which members of the reserve army can be ushered to form a new, lower-paid, less-protected, not-yet-organised workforce. And in the next stage, either the original trade union organisations open their doors to include these

[4]Op. cit.: 256.

[5]Op. cit.: 248.

workers, or the freshly employed workers form new organisations of their own.

The history of capitalism thus includes within it a multi-layered and contradictory history of workers' combination. At one level, workers' organisations engage in an ongoing dialogue with employers in which innovation by the employer is followed by resistance from workers, which is followed by compromise and agreement, followed by further innovation and further resistance. At another level, a similarly complex dialectic of closure and conditional opening, exclusion and inclusion is engaged in between different groups of workers. The actions taken by skilled tailors in mid-nineteenth century London to prevent the recruitment of less skilled stitchers are fundamentally little different from those of skilled typesetters in the 1970s printing industry resisting the recruitment of word processor operators to substitute for their high-paid work or those of licensed taxi drivers in the twenty-first century organising against Uber drivers operating in their cities.

The dynamic and problematic relationship between well-organised and skilled workers and the reserve army can be regarded as a typical and regularly occurring feature of capitalism. Strong, shared occupational identities often form the building blocks of workers' organisations. Yet the very need for these workers' organisations is predicated on the threat to these self-same occupational identities, which are always in danger of obsolescence. But, built on exclusion as they are, these organisations, if they remain in this form, can never transcend the limits of sectionality. They stand at a tangent, in a tense and constantly shifting relationship, to the interests of the unorganised (or unrecognised) parts of the workforce[6] thus forming a barrier to wider class unity.

Attempts to formulate demands that encompass the interests both of organised labour and of the reserve army require a broader approach: one that extends beyond a negotiation with a particular capitalist, or group of capitalists in a particular industry, to the level of the state, and/or the entire class of capitalists. The history of capitalism has provided us with many examples of such political campaigns. However these have

[6]I have written more extensively about the problematic character of occupational identity under capitalism in Huws, U. (2006) 'What Will We Do? The Destruction of Occupational Identities in the "Knowledge-Based Economy"', *Monthly Review,* 57 (8).

varied considerably, not only because they have been rooted in different historical and geographical contexts, and because they have been successful to different degrees, but also because of the heterogeneous nature of the reserve armies that have been included in them. The reserve army, needless to say, does not consist of a simple undifferentiated mass of labour that can be summoned out of the blue. It is made up of specific groups of people, with particular social and cultural characteristics and with differing relationships both to the existing workforce and to each other and these characteristics affect the degree to which their interests coincide with, or seem opposed to, those of organised workers.

In the period that E. P. Thompson was writing about, the reserve army was often made up of women and children—even including the family members of existing organised workers. The relationship of these organised workers to such cheaper substitutes was obviously very different from the relationship they might have had to other reserve army members, for example migrant workers from another part of the country, or 'blacklegs' drawn from local unemployed paupers to work during a strike. Later in the nineteenth century, political campaigning by workers' organisations against the use of female and child labour led to a number of demands, many of which were linked to notions of family wellbeing: prohibitions on child labour, a shorter working day, prohibitions on women working at night, a 'family wage' that would enable a (male) breadwinner to support a dependent family without the need for other members to work and—in some industries—the exclusion of female workers altogether, or of married women. Decades of feminist scholarship have shown how problematic this could be for women workers for whom the price paid for escaping from the control of the employer was often that of being subjected further to that of the husband.[7] In the many cases where the male wage was *not* sufficient to support a family, it meant that women entered the workforce on unequal terms, often in particular occupational niches reserved only for women, on lower pay and with fewer rights than their male counterparts. Nevertheless, such developments represented a compromise that mitigated the worst effects of having organised workers pitted against the reserve army and

[7] For one example among very many, see Liddington, J. & J. Norris (1978) *One Hand Tied Behind Us: The Rise of the Women's Suffrage Movement,* London: Virago.

provides a basis for a form of cross-class solidarity, albeit one which may benefit the male members of that class at the expense of women.

In the early nineteenth century, however (as in other periods), the use of child and female labour was by no means the only way in which employers undercut the value of the labour of skilled male workers. One strategy was to separate workers from each other as much as possible, making it impossible for them to compare notes and develop joint strategies. Thompson quotes evidence from a Salford weaver to a Parliamentary Committee in 1834.

> The very peculiar circumstances in which the hand-loom weavers are situated preclude the possibility of their having the slightest control over the value of their own labour.… The fact that the weavers of even one employer may be scattered over an extensive district presents a constant opportunity to that employer, if he be so minded, to make his weavers the means of reducing the wages of one another alternatively; to some he will tell that others are weaving for so much less, and that they must have no more, or go without work, and this in turn he tells the rest.… Now the difficulty, and loss of time it would occasion the weavers to discover the truth or falsehood of this statement, the fear that, in the interval, others would step in and deprive them of the work so offered … the jealousy and resentment enkindled in the minds of all, tending to divide them in sentiment and feeling, all conspire to make the reduction certain to be effected…. (quoted in Thompson, op. cit.: 280)

The use of 'outwork' (the practice of employing remotely-based workers, typically paid 'by the piece' rather than a wage, and lacking personal contact with the centrally-based skilled workforce) was, according to Thompson, particularly associated with attempts to break down the organisation of skilled workers:

> Wherever we find outwork, factory or large workshop industry, the repression of trade unionism was very much more severe. The larger the industrial unit or the greater the specialisation of skills involved, the sharper were the animosities between capital and labour, and the greater the likelihood of a common understanding among the employers. We find some of the sharpest conflicts involving men with special skills who attempted to attain to, or

> to hold, a privileged position – cotton-spinners, calico-printers, pattern-makers, mill-wrights, shipwrights, croppers, woolcombers, some grades of building worker. We find others involving large number of outworkers – notably weavers and framework knitters – attempting to resist wage-cutting and the deterioration of status. (Thompson, op. cit.: 506)

Strategies like these were certainly not unique to the early nineteenth century. Variants of them can be found throughout the history of capitalism, albeit tailored to the particular circumstances of time and place. We could, for example, cite the way in which IT companies used home-based software engineers, mainly women, as cheaper substitutes for office-based equivalents to carry out maintenance on large mainframe computers during the 1970s and early 1980s[8] or, in the twenty-first century, the use of online platforms to recruit remote workers for micro-work paid by the task.[9]

Other strategies adopted by capitalists include the recruitment of workers from different castes, religions, nationalities, ethnicities or religions to substitute for the existing workers, or to work alongside them in slightly different roles, introducing new forms of segmentation into the workforce and exploiting traditional hostilities among these groups. It is difficult to find any form of social, linguistic or cultural difference that capitalists have not at one time or another exploited for the purposes of cheapening the cost of labour or sowing divisions among workers, from the use by British capitalists of Irish workers in the nineteenth century construction industry to that of Central Americans by US capitalists in the twenty-first. Deliberate fomenting of racial hatred within the working class by those who benefit from such divisions is just as endemic.

Over the decades, as they have transitioned between purely local and sectoral demands and broader political ones, sometimes fighting amongst themselves, sometimes collaborating with other worker-or community-based organisations, trade unions have found themselves positioned on different sides of many struggles and political campaigns: for and against

[8] See Huws, U. (1984) *The New Homeworkers: New Technology and the Changing Location of White-Collar Work*, London: Low Pay Unit.

[9] See, for example, Huws, U. (2017) 'Where Did Online Platforms Come From? The Virtualization of Work Organization and the New Policy Challenges it Raises' in P. Meil & V. Kirov (eds) *The Policy Implications of Virtual Work*, London: Palgrave Macmillan: 29–48.

civil rights; for and against women's emancipation; for and against wars; for and against protectionist trade agreements; for and against anti-imperialist nationalist struggles; for and against a statutory minimum wage; for and against immigration; for and against granting rights to the self-employed. The list, which could easily be extended, illustrates the ongoing tensions between the sectional interests of particular groups of workers and the barriers these tensions pose to the development of broader class unity.

Nevertheless the history of workers' organisations, while demonstrating the challenges of attempting to marry sectional economic demands with broader political ones, also provides abundant examples of aspirations to develop just such forms of unity. Thompson describes the admixture of very specific protectionist trade union demands with wider moral and political goals in the early nineteenth century.

> … by the early years of the 19th century it is possible to say that collectivist values are dominant in many industrial communities; there is a definite moral code, with sanctions against the blackleg, the "tools" of the employer or the un-neighbourly, and with an intolerance towards the eccentric or individualist. Collectivist values are consciously held and are propagated in political theory, trade union ceremonial, moral rhetoric. It is, indeed, this collective self-consciousness, with its corresponding theory, institutions, discipline, and community values which distinguishes the I9th century **working class** from the I8th century **mob**. (Thompson, op. cit.: 424)

This is not the place for a detailed analysis of the twists and turns of trade union history, caught in the ever-changing mesh of contradictions thrown up by the tumultuous development of capitalism on the one hand, and, on the other, moulded by the particular social, cultural and economic circumstances that have formed the consciousness of the workers who make up the membership of specific unions. Instead, it is perhaps useful to focus on one particular period in the middle of the twentieth century, when trade unionists in a number of relatively developed economies successfully entered into alliances with political parties to broker compromises which seemed at the time to resolve at least some of these contradictions.

The period that followed the Second World War has a special place in the history of capitalism. Sometimes known as the 'post-war Keynesian

welfare state',[10] 'the Golden Age of Capitalism',[11] '*Les Trente glorieuses*' ('the glorious thirty years')[12] or 'Fordism',[13] this was a time when a number of different circumstances converged to produce a particular, and—at the time seemingly durable—kind of compromise between capital and labour, with national states playing a key part in shaping the relationship between employers and workers on their territories, a governmental role that has been characterised differently among political economists. Leo Panitch regards the national government as playing the role of a 'mediator'[14] in this relationship, Robert Cox sees the state as a 'transmission belt from the global to the national economy',[15] and David Coates as an 'orchestrator'[16] of relationships between capital and labour. Of course not all nation states are the same, and the precise details of this compromise varied considerably from country to country, not only because of different national traditions but also because of the differing capacities of states to exercise the power to impose its rules. At one extreme, we find the hegemonic power of the USA and, at the other, 'failed states' that cannot even guarantee a rule of law sufficient to enforce the most basic labour standards. Nevertheless, during the third quarter of the twentieth century, compromises emerged in most of Western Europe as well as other developed economies such as Japan, Canada, Australia and South Korea that were sufficiently similar to suggest that a new normative model of work organisation was emerging, embedded in what was sometimes referred to as 'welfare capitalism'.[17] For some, this model of employment still exists as a kind of ideal type,

[10] Jessop, B. (1990) *State Theory: Putting the Capitalist State in Its Place,* Cambridge: Polity.

[11] Marglin, S. A. & J. B. Schor (1992) *The Golden Age of Capitalism: Reinterpreting the Postwar Experience*, Oxford: Oxford University Press.

[12] Fourastie, J. (1979) *Les Trente Glorieuses, ou la révolution invisible de 1946 à 1975*, Paris: Fayard.

[13] In the French Regulation School approach (see Aglietta M. [1976] *Crises et régulation du capitalisme*, Paris: Calmann-Lévy; Lipietz, A. & D. Macey [1987] *Mirages and Miracles: Crisis in Global Fordism,* London: Verso.) the term 'Fordism' does not just mean a particular form of work organisation, using production lines as pioneered by the Ford Motor Company, but denotes a hegemonic mode of production and accumulation that characterised a whole era and was reflected in a particular type of government regime.

[14] Panitch, L. (2004) 'Globalization and the State' in L. Panitch, C. Leys, A. Zuege, & M. Konings (eds) *The Globalization Decade*, London: Merlin: 9–43.

[15] Cox, R. (1992) 'Global Perestroika', *Socialist Register*, 28: 26–43.

[16] Coates D. (2000) *Models of Capitalism: Growth and Stagnation in the Modern Era*, Cambridge: Polity Press.

[17] Esping-Andersen, G. (1990) *The Three Worlds of Welfare Capitalism*, Cambridge: Polity Press.

representing what 'decent work' or 'a proper job' should be like: permanent, secure, protected, well-regulated, conferring clear duties on the employer and rights on the worker.

Various attempts have been made to classify the different types of welfare capitalism that emerged during this period. Gøsta Esping-Andersen[18] identified three 'worlds of welfare capitalism': 'corporatist', 'social-democratic' and 'liberal'. David Coates[19] grouped developed economies into four categories: those that were 'state-led', those that were 'market-led', and those that were 'negotiated/consensual', the latter category being subdivided into 'corporate' and 'social-democratic' types. Peter Hall and David Soskice[20] identified two types of social systems of production in their 'varieties of capitalism': 'co-ordinated market economies' and 'liberal market economies'. These typologies have been criticised by feminists for failing to take account of variations in national types of gender regimes[21] especially the important differences between those states with policies that encouraged a 'housewife/breadwinner' family model and those that encouraged both men and women to take paid jobs in the labour market. Nevertheless, the typologies draw attention to underlying similarities, as well as differences, among the variant models, suggesting that there was indeed some sort of international consensus about the essential ingredients of welfare capitalism.

To varying degrees and in differing ways, what these national systems produced was a deal between capital and labour, brokered by national governments, in which welfare states took care of at least some aspects of the basic social reproduction of the workforce, producing workers who, once appropriately trained, could expect full-time permanent employment over a defined period of working life, with a good education at the beginning and a pension at the end, and with unemployment and sickness seen as occasional misfortunes, covered by some form of social insurance. Along

[18] Ibid.

[19] Coates D. (2000) *Models of Capitalism: Growth and Stagnation in the Modern Era*, Cambridge: Polity Press.

[20] Hall, P. A. & D. Soskice (2001) *Varieties of Capitalism*, Oxford: Oxford University Press.

[21] See, for example, Sainsbury (1994) *Gendering Welfare States,* London: Sage; Lewis, J. (193) *Women and Social Policies,* London: Edward Elgar; and Ostner, I. (2008) *Family Policies in the Context of Family Change: The Nordic Countries in Comparative Perspective,* VS Verlag für Sozialwissenschaften, Berlin and Heidelberg: Springer.

with other institutions, such as education providers, trade unions played an active role in negotiating the terms of these compromises, in some cases as members of tripartite committees in which the other two parties were representatives of employers' associations and of government. In playing this role, trade unions stepped up above the sectional interests of their paid-up members and took on the responsibility for representing the working class as a whole at the national level. This presented them with the challenge of formulating demands that would benefit the reserve army while not posing a threat to the high standards of wages and working conditions of organised workers. Policies that failed to provide a basic level of income and social protection for the destitute would run the risk not only of spreading poverty (and the diseases of poverty) across the whole nation but also of undercutting organised workers in the labour market, so there was a clear need, articulated most explicitly by social democratic political parties, to set in place some sort of universal safety net for all national citizens. These demands were not, of course, granted unconditionally, but had to be negotiated with the respective employers' associations and national governments, producing compromises that varied in their detail between countries and over time.

This process played out differently in relation to different types of members of the reserve army. The unskilled unemployed were (depending on country) offered such things as training courses, benefits that enabled them to support themselves and their families without falling into such desperate poverty that they would be prepared to cross a picket line to take the job of an organised worker, a minimum wage to protect the earnings of vulnerable workers in low-skilled jobs when they entered the labour markets and, in some cases, special kinds of sheltered employment, for example for people designated as disabled or ex-prisoners.

Where the reserve army consisted of women workers, this was typically negotiated in a way that was ambivalent in its implications for their independence and equality with men. The housewife-breadwinner model, to which many workers (and the trade unions that represented them) aspired, aimed for a situation where the male wage was high enough to support not only the (putatively male) worker but also his wife and children. Unmarried women were often treated as pseudo-men; if they were paid less than men then there was a risk that they would be recruited to replace them.

Thus, for example, women who were teachers or civil servants were paid the same as men during the 1950s in the UK but were expected to resign their jobs on marriage. Later, when, as a result of feminist campaigns in the 1960s, laws were introduced to abolish discrimination between men and women on the grounds of sex or marital status, and to introduce equal pay for men and women doing the same work, they did little to reduce occupational segregation based on gender. In the UK, for example, the Equal Pay Act of 1970 (partly triggered by a strike of women sewing machinists working at the Ford car factory in East London[22]) did not actually come into effect until 1975, giving employers a five-year period in which they could 'prepare for the Act'. The Act established the right for equal pay: if 'the work done by the claimant is the same, or broadly the same, as the other employee'; if 'the work done by the claimant is of equal value (in terms of effort, skill, decision and similar demands) to that of the other employee'; or if 'the work done by the claimant is rated (by a job evaluation study) the same as that of the other employee'.[23] During the five-year preparatory period, women and men doing similar jobs were often shuffled apart or given different job titles and job descriptions (for example a female server in a café would be designated a 'waitress' and her male counterpart an 'assistant manager') and a large number of job evaluation studies were carried out in which work processes were analysed and points awarded for various different kinds of 'effort', 'skill' and so on, producing job profiles that gave a scientific legitimacy to a ranking that might, for example, give a (male) fork-lift truck driver in a factory a higher rating than a (female) skilled sewing-machine operator in the same factory. It thus became extremely difficult for a woman to find a male comparator in order to make a claim for equal pay.

Another important component of the reserve army was made up of immigrant labour. In the UK and France this was typically from former colonies in Africa, South Asia and the Caribbean, in the USA from Latin America and in Japan from Korea. In West Germany the labour force included large numbers of 'guest workers' from Greece, Turkey and North Africa. There were variations between countries in relation to the rights of

[22] Famously commemorated in the 2010 film *Made in Dagenham,* directed by Nigel Cole.

[23] *Equal Pay Act: An Act to prevent discrimination, as regards terms and conditions of employment, between men and women,* 1970, Parliament of the United Kingdom.

these workers to citizenship and other benefits but there was a general pattern by which they were discriminated against in many ways and subjected to racist abuse. During the 1960s, as with women's demands, there was an upsurge in general agitation against such injustice and for civil rights, which led to some attempts to legislate against its worst manifestations. In the UK, for example, the 1965 Race Relations Act was amended in 1968 to make it illegal to refuse housing, employment, or public services to a person on the grounds of colour, race, ethnic or national origins.[24]

Nevertheless, the integration of reserve army populations into the mainstream of the labour market remained, at best, partial. The compromise negotiated at national level in most Western developed economies led in practice to the development of what were described by Peter Doeringer and Michael Piore[25] as 'dual labour markets' in which the workforce was effectively split into two groups: a relatively privileged group of 'insiders' with full-time permanent jobs and a high level of social protection (in a 'primary' or 'firm' labour market), and a more dispensible group of 'outsiders' (in a 'secondary' labour market), more likely to be employed casually or on temporary or part-time contracts and with fewer rights and privileges.[26] Even in Scandinavia, where, it could be argued, welfare capitalism achieved its broadest reach, through the provision of welfare benefits granted to the whole population as a right of citizenship, the normative employment model supposed to characterise it could not be said to have been genuinely universal.

It is perhaps no accident that the 'golden age' of capitalism coincided both with the large-scale immigration referred to earlier and with an expanding participation of women in the workforce. Women constituted a labour reserve that was largely excluded from the primary labour market by the long and rigid working hours that were required, by the continuous and long-term loyalty to the corporation that was demanded, by their

[24] *Race Relations Act, 1968: An Act to make fresh provision with respect to discrimination on racial grounds, and to make provision with respect to relations between people of different racial origins*, 1968, Parliament of the United Kingdom.

[25] Doeringer, P. B. & M. J. Piore (1971) *Internal Labor Markets and Manpower Analysis,* Lexington, MA: Lexington Books.

[26] This rather simple dual model was later refined to suggest that labour markets were segmented in more complex ways. See for example Wilkinson, F. (1981) *The Dynamics of Labour Market Segregation,* London, New York, Toronto, Sydney, and San Francisco: Academic Press.

exclusion from access to certain skills and also by plain old-fashioned prejudice.

Although in the immediate aftermath of World War II there was a compulsory expulsion of women from many jobs they had occupied during the war, to make way for the returning troops, many did not stay at home for long. From the 1950s onward there was a steady increase of women in the labour force. In the USA, for instance, 34% of women worked in 1950, but this grew to 38% in 1960, 43% in 1980, 58% in 1990 and reached 60% by the end of the century.[27] In the UK, women's labour market participation grew from 46% in 1955, to 51% in 1965, 55% in 1975, 61% in 1985 and 67% in 1995 and there were similar patterns in many other European countries.[28] However this participation was, overwhelmingly, on different terms from men's. Not only was there strong segregation, with men and women working in different occupations and in different industries, but women were also much more likely to be working part-time.

An accommodation was reached whereby employers offered work on terms that it made it possible for women to combine it with housework and motherhood but at inferior wages and without the protections extended to full-time permanent employees. In accepting these terms, part-time women workers posed a complex challenge to the organisations that represented the interests of full-time male workers.

On the one hand, their earnings were providing a vital supplement to the 'family' wage, which was in most cases becoming insufficient to provide a whole family with all the goods and services which were newly becoming 'essential' in an increasingly materialistic post-war consumer society (indeed, in many occupations and industries, the male wage had always been too low to keep a family out of poverty). On the other hand, women's role as a reserve army could be seen as contributing to that very reduction in the value of the male wage and undermining the strength of the organised groups of workers whose bargaining position with employers had traditionally been based on the exclusivity of their skills.

---

[27]Toosi, M. (2002) 'A Century of Change: The U.S. Labor Force, 1950–2050', *Monthly Labor Review*, May.

[28]Walsh, M. (2001) 'Womanpower: The Transformation of the Labour Force in the UK and the USA Since 1945', *Recent Findings of Research in Economic and Social History*, Summer.

Whilst occupational segregation minimised the extent to which women workers could directly undercut skilled male workers, this began to break down when those male skills were downgraded, for instance when the introduction of computer technology brought about a convergence between the skills of male craft workers, such as typesetters or lathe operators, and those of female office workers, such as typists. In the face of these contradictions, it was little wonder that there were debates within trade unions about whether the types of 'atypical' work overwhelmingly done by women should be banned or whether, on the contrary, efforts should be made to recruit these 'atypical'[29] workers into trade unions and organise them.

In some ways, these debates can be seen as a re-enactment of more general disputes within the labour movement about whether women should be treated as equal to men or given special protective treatment as (frail) members of working class households, debates that have been played out historically in relation to issues ranging from bans on women working night shifts (something which was only repealed in the Philippines in June, 2012) to the right to 'menstruation leave'.[30] However it is significant that these discussions were focused on various aspects of flexible work precisely during a period when the principles of equal pay and avoidance of sex discrimination were being inscribed in law across the developed world, as discussed above in relation to the UK equality legislation. In many countries this ambivalence was reflected in divisions within the trade union movement over such questions as whether or not to include part-time, or self-employed workers as members, whether to call for bans on homeworking or, on the contrary, to try to bring it within the scope of collective negotiation, or whether to support a national minimum wage for non-unionised workers. Such disputes did little to help develop coherent responses to casualisation on the part of the labour movement, although the national consensuses arrived at during this period certainly created a situation where for most workers, especially those who were skilled, male

[29] I have been unable to trace the origin of this term. It has been widely used by many bodies, including the European Commission, to group together forms of employment that are not permanent and full time. See, for instance, http://www.eurofound.europa.eu/areas/industrialrelations/dictionary/definitions/atypicalwork.htm.

[30] A right which existed in many sectors in Japan, discussed in Huws, U. (2003) *The Making of a Cybertariat: Virtual Work in A Real World,* New York: Monthly Review Press: 78–79.

and white, labour was less precarious in developed Western countries than during any other historical period, and the normative model of full-time permanent employment was still seen as what a 'proper job' should look like.

Nevertheless, seen from the perspective of women, and, indeed, from the perspective of the majority of the workforce in most developing countries, precariousness was then and still remains the normal condition of labour under capitalism and, in this broader context, the normative model was always more likely to be an exception than the rule. Given the enormous asymmetries between capital and labour, what needs to be explained by historians is not so much how this precariousness has come about but how it is that in the 'golden age' period, in those particular places, certain groups of workers managed to organise themselves effectively enough to achieve such an unprecedented degree of income security and occupational stability. The labour market, is, after all, one to which a worker can only bring a finite amount of energy, skill and knowledge in one specific spot at one specific time, whilst employers can usually draw on reserves of capital and alternative sources of labour independently of space and, very often, also of time of day. In a broad historical and geographical perspective, it seems that, however much we might like to think of them as 'normal', it is the special deals of the 'golden age' that constitute the great exceptions to this general rule.

To understand the success of the special deals that were struck during this period, we must take into account the particular political as well as economic circumstances that confronted national governments in the post-war period in developed capitalist economies. These included strong demands from their populations for basic welfare services and no return to the still vividly-remembered depression conditions of the 1930s, from a working class emboldened by the experience of war and the rhetoric of 'we're all in this together' that had accompanied it, and broke down some of the more obvious class differences that were manifest in earlier periods. Another important factor was the Cold War and the way in which the threat of communism was used not just to frighten people away from broad socialist demands but also to coerce the leadership of trade unions and social democratic parties to participate in national economic forums and collective bargaining systems and generally embed themselves with

what were still largely seen as national companies in national systems of co-regulation.

Another part of the explanation is related to the particular stage of capitalist development that had been achieved during this period. The spread and reach of transnational corporations (TNCs) was still relatively low and their operations constrained by national regulatory systems. There was scope in many national contexts for large companies, often in collaboration with national public institutions, to take a longer-term strategic approach to investment in the skills and loyalty of their workers. Technological development, though advancing fast, was still such that there was a heavy reliance on company-specific and sector-specific skills and expertise, much of it tacit, which conferred considerable bargaining power on the 'insider' workers with the requisite contextual knowledge, craft-based skills or occupational qualifications. Employers benefited from these deals through enhanced loyalty and long-term commitment from workers, as well as the fact that their trade unions were often prepared to make concessions in bargaining whereby workers provided greater productivity (for example by accepting more intensive working methods or the introduction of new technologies) in exchange for higher wages and job security. Governments were prepared to invest in research and development to foster 'national champions' that could compete globally and promote national economic development.

These mutually reinforcing political and economic factors were further buttressed by social and cultural ones, including the gender regimes already referred to. The resulting political compromises, although they seem stable when viewed in retrospect from a twenty-first century vantage point, were in reality always shifting and contingent, riddled with contradictions. The provision of some universal protections to national reserve armies may have smoothed over some of the differences, enabling forms of solidarity that would not have been possible if the latter were a desperate, starving rabble, but did not by any means dissolve the differences between labour market 'insiders' and 'outsiders', or the tensions underlying these differences. However these compromises did to some extent normalise and institutionalise these relationships, with trade unions playing a role, along with employers' associations, in negotiating the terms and conditions whereby governments regulated the partial inclusion of 'secondary'

or 'atypical' workers into their national labour markets and awarded them some of the social and employment rights accompanying this inclusion. Despite these inadequacies and conditionalities, the model did hold up pretty well and indeed continued to strengthen during the period of capitalist expansion that lasted from the end of the Second World War up to the oil crisis of 1973, when the effects of the falling rate of profit once again made themselves felt dramatically, provoking another one of capitalism's recurrent crises.

Since then, we have in many respects witnessed a slow unravelling of the special deals forged in that quarter century.[31] It is tempting to see this gradual disintegration since the 1980s as a simple reversal or backward swing of a pendulum: women left the workforce, then came back; the Berlin Wall went up, then came down, pensions became more generous, then they were reduced; public sector work became a job for life, then it ceased to be so; computer engineers became a well-paid part of the labour aristocracy, but then they were brought down to earth with a bump. And so on.

But such thinking is mistaken. The casualisation of labour that has taken place around the globe during this period differs in several respects from earlier forms. First, it is taking place in a context of globalisation. Capital can now access a reserve army of labour regardless of national borders for a wide variety of activities, either by means of moving the jobs abroad (offshoring) or by bringing in migrant workers to its existing heartlands for tasks ranging from street-cleaning to medical consultancy.[32] Second, casualisation is taking place within spheres formerly occupied by labour-market insiders: the core functions of large global organisations which ostensibly form part of the 'formal economy'. Even when casualised labour is not carried out by their direct employees, it is carried out within the scope of the increasingly elaborated value chains which these companies control. Third, the pressures on companies to drive down their costs, including—especially—labour costs, are more intense than in earlier periods because of the increasing size of corporations, the intensification

[31] I have discussed this at greater length, *inter alia*, in Huws, U. (2016) 'Logged Labour: A New Paradigm of Work Organisation?' *Work Organisation, Labour and Globalisation* 10 (1): 7–26.

[32] Huws, U. (2006) 'Fixed, Footloose or Fractured: Work, Identity and the Spatial Division of Labour', *Monthly Review,* 57 (10), March.

of competition, the global extension of value chains, the general drive to speed up and the impact of financialisation, bringing with it the need to deliver short-term returns to shareholders. The implications of these developments for trade union strategies are profound.

When the reserve army is a global one, when the employers in any given country are increasingly likely to be TNCs with no particular roots there, and when a high proportion of the workforce may be migrant workers lacking national citizenship of the country in which they work, then the cosy triangular relationship between national employers, national trade unions and national governments breaks down. After the end of the Cold War (symbolised by the destruction of the Berlin Wall in 1989) the whole world became an open field for unbridled capitalism. This made possible the establishment of a neo-liberal global trade regime, institutionalised through mechanisms like those of the World Trade Organization (established in 1995), a regime in which not physical goods but also capital, services and intellectual property rights could move freely from country to country—although the restrictions on the movement of labour remained harsh, outside certain blocs. In this new context, nation states lost many of the powers they had held previously, such as the ability to break up large monopolies and the ability to tax international corporations doing business on their territories. This made it harder to discipline capitalist organisations and bring them to the negotiating table.

Meanwhile, it was much more difficult for trade unions to forge meaningful alliances that enabled them to pose demands on behalf of the reserve army when that reserve army was either located in other countries or consisted of newly-arrived immigrants. The knee-jerk reaction of workers to their factory jobs being relocated to China, or their call centre jobs to India, is unlikely to be one of unconditional solidarity with the Chinese or Indian workers they see as taking their jobs—although, to their credit, many trade unionists have demonstrated commendable altruism in resisting racist responses to offshore outsourcing and immigration. Similarly, there is a burning resentment among many workers in regions of industrial decline against the immigrant workers they see as taking their jobs. Whipped up by xenophobic political parties and the mass media, such feelings have contributed to a resurgence of resentment against migrant workers, sometimes manifested in racist attacks against them, which has

been one of the factors contributing to the rise of new parties of the right, exemplified in the Brexit vote in the UK referendum and the Trump victory in the US presidential election in 2016, the rise in votes for far-right parties in France, Germany and the Netherlands, and the election of Viktor Orban in Hungary, Sebastian Kurz in Austria and Mateusz Morawiecki in Poland.

Just as the fragile solidarities between organised workers and the reserve army have started to collapse, so too have many of the components of the welfare systems that propped up these solidarities in the 'golden age'. Benefits that were universal are increasingly means-tested and provisional, with claimants having to engage with extensive and demeaning bureaucratic procedures in order to claim them. In some countries unemployment benefits previously paid as of right to workers who lost their jobs have been replaced by conditional benefits, payable only on the basis of evidence of actively seeking work, and with a lower monetary value. There are greater pressures on the unemployed to take on unpaid work experience or internships, and to accept low-paid jobs. In the UK, the state tops up low incomes by means of tax credits, providing what is, in effect, a subsidy to employers who pay below-subsistence wages.

A welfare system that was originally designed to be redistributive from the rich to the poor now redistributes in the opposite direction. To understand the scale of this reverse redistribution, it is instructive to look in detail at the ways in which the tax system and the benefit system interact with the labour market. This can be illustrated by the UK case.

First, we need to look first at who is putting money into the system—the taxpayers—and then at who the beneficiaries are. Those who get their information from popular daytime television shows such as *Saints and Sinners* or *Life on Benefits Street* or the tabloid press,[33] might find it difficult to believe that the welfare system is not simply channelling money from 'hardworking taxpayers' to 'scroungers'. But in fact, the pattern of contribution to government income has changed substantially. Less and less is coming from corporations and the rich and more and more from VAT (value-added tax) and other indirect taxes. This shift has accelerated

[33] I have discussed the way that work and welfare are presented on British daytime TV at greater length in Huws, U. (2015) 'Saints and Sinners: Lessons About Work from Daytime TV', *International Journal of Media & Cultural Politics*, 11 (2): 143–163.

since the recession of 2008. In the words of the Institute for Fiscal Studies 'there have been substantial reductions in revenues from personal income, capital and corporation taxes as a proportion of national income. This has been partially offset … by more revenue from indirect taxes, driven almost entirely by the increase in the VAT rate to 20% from April 2012'.[34] And, as Richard Murphy has demonstrated, 'the poorest 20% of households in the UK have both the highest overall tax burden of any quintile and the highest VAT burden. That VAT burden at 12.1% of their income is more than double that paid by the top quintile, where the VAT burden is 5.9% of income'.[35] Meanwhile many large global corporations—including those that benefit from employing low-paid workers—pay no tax whatsoever in the UK.

It is clear, therefore, that the poor are contributing disproportionately to the pot of money that pays for public services and welfare benefits, but surely they are also the main beneficiaries? This too turns out to be incorrect. Much of the spending on housing benefit goes, not to tenants but to the private landlords who house them. Much of the spending on health and education ends up being paid not to hospitals and schools but to the development companies that construct and manage them, under Private Finance Initiative (PFI) as well as to pharmaceutical companies, private academies and the multinational companies such as SERCO and G4S that provide the public sector with outsourced services. As to the tax credits (at the time of writing being replaced by the universal credit system) which have replaced traditional welfare benefits, it has been estimated[36] that by 2015 expenditure on these credits had already reached 30 billion per annum. These credits are paid as a top-up to low earnings and therefore act as a direct subsidy to employers who pay workers so little that they cannot survive without this top-up. Meanwhile the administration of the benefit system has become increasingly harsh, with penal fitness-to-work checks (administered by private companies) applied even to the terminally ill, and benefits withdrawn for the most minor infringements of Job Centre

[34]Miller, H. & T. Pope (2016) *The Changing Composition of UK Tax Revenues,* London: Institute for Fiscal Studies: 4.

[35]Murphy, R. (2010) 'Is VAT Regressive and If So Why Do the IFS Deny It?' *Tax Research UK*: 4.

[36]Full Fact (n.d.) Accessed on February 11, 2019 from: https://fullfact.org/economy/tax-credits-how-much-has-spending-increased-16-years/.

rules, such as turning up late for an appointment. In short, benefit systems that were originally intended to protect workers from destitution have been transformed into new means of coercion to work, rather like a twenty-first century version of a nineteenth century workhouse, only without even the provision of a roof to provide shelter from the weather or a supply of gruel to avert starvation.

State services have been opened up as a new field of accumulation for capital, with TNCs making hefty profits out of running such services as Job Centres, social care schemes, health services, prison services and so on. The simple nationally-bounded universal model that underpinned 'welfare capitalism' is no longer functional. The increasing dominance of TNCs and neo-liberal policies has also brought about a convergence between different national models, which are no longer as distinctively different from each other as they were during the golden age of welfare capitalism. These growing similarities in employment practices and government policies among governments and employers has not always been matched by convergence on the trade union side.

Here, the landscape is marked by considerable diversity both between and within countries. Not only are there varying degrees to which unions are involved in, and committed to, national frameworks of 'social dialogue', and labour market regulation but there is also an enormous variety in the forms of collective bargaining that take place, which may be at national, sectoral or company level, or take the form of inputs into the processes by which national systems of training, qualifications and occupational descriptions are determined. To this must be added another dimension of heterogeneity—the basis on which trade unions have historically been formed and on which they represent their members in any given context. They may be craft-based, occupation-based, company-based, sector-based or rooted in allegiances to particular regional and/or ethnic and/or political identities, ideologies or parties. Whilst some are formally allied to, or closely identified with, particular national political parties, others are closer to social movements, whilst still others remain firmly sectional and non-aligned.[37]

[37] Beiler, A., I. Lindberg & D. Pillay (2008) *Labour and the Challenges of Globalization: What Prospects for Transnational Solidarity?* London: Pluto Press.

While many are undergoing major change to address the new challenges of globalisation, technological change, declining membership and the need to recruit new groups of workers, it should not be taken for granted that all trade unions necessarily see a need for such changes, especially when the power positions of existing bureaucrats are well entrenched and the present situation is still producing some positive gains for existing trade union members. But even if a decision has been taken that a new direction is needed, with such a variety of traditions and models it is by no means obvious what path should be followed.

Perhaps more important than any abstract debate about the particular basis on which unions should merge or form alliances with their counterparts in other countries, or with other social or political movements in their own countries, is the reality of what workers they actually represent at present and what negotiating power, if any, these workers have in the actual locations where they based. Without such power, they are unlikely to win anything. As Ellen Woods pointed out,[38] even though international alliances between workers' organisations are becoming increasingly important, in order to provide mutual support, whether this is in disputes with companies or states, national states remain crucially important arenas of action. Whatever action workers take must be taken in the specific locations where they are already working and organising and, in taking these actions, they need to draw on the support not just of fellow workers (who may or may not be local) but also of other groups in the communities where they live and work. There is thus a need for two kinds of solidarity: a linear kind of solidarity along the value chain, between workers who may not ever meet each other in person but whose interests are closely intermeshed because they work (directly or indirectly) for the same employer in complementary roles, and a location-based solidarity delivered through local networks, which may involve other branches of the same union, other unions, or other organisations.

As the need for these alliances becomes clearer, it is to be expected that debates will intensify, both nationally and internationally, about the best way to bring them into being. Such debates cannot be separated

[38] Woods. E. M. (1998) 'Labor, Class and State in Global Capitalism', in E. M. Woods, P. Meiksins, & M. Yates (eds) *Rising from the Ashes: Labor in the Age of 'Global Capitalism'*, New York: Monthly Review Press: 3–16 (15).

from broader questions about which workers trade unions can and should represent, in a context in which trade union membership is declining in most countries, as larger and larger proportions of the workforce fall outside their traditional spheres of influence, because of factors including increases in immigration, informalisation, and the decline of traditionally strongly unionised sectors.

Taken together, these factors leave trade unions with a major double dilemma. Not only is there no longer an effective national forum in which they can hammer out tripartite deals with employers, brokered by the national government. There is also increasingly a need for them to engage with organisations that are based outside national borders, with no clear mechanism for doing so apart from international confederations which tend to be bureaucratic and consensus-seeking and offer little scope for ad hoc solidarity actions.

Of course this challenge is not without precedent. International trade union solidarity has a long history. The phrase 'workers of the world unite' was coined by the French-Peruvian socialist Flora Tristan[39] (1803–1844) before Marx and Engels made it famous in their 1848 *Communist Manifesto*, and throughout the nineteenth century there were instances of European workers taking action in solidarity with their counterparts in other countries. In 1850, for instance, London brewery workers mounted an attack on the Austrian Field Marshall von Haynau in solidarity with workers in Italy and Hungary whose uprisings he had put down. Whilst they claimed that this was for altruistic reasons saying that 'the infliction of tyranny and cruelty in one country is an outrage to all nations',[40] many actions had an element of self-interest. For example in the 1859–1861 London building workers' strike, the unions engaged in international solidarity action in order to avoid strike-breaking by foreign workers, and this was also a strong motivation behind the setting up of the International Working Men's Association, or First International, in 1864.[41]

[39] Tristan, F. ([1843] 1983) *The Workers Union*. Translated by Beverly Livingston. Chicago: University of Illinois Press: 77–78.

[40] Press, M. (1989) 'The People's Movement' in M. Press & U. Huws (eds) *Solidarity for Survival: The Don Thompson Reader,* Nottingham: Spokesman: 26–47.

[41] Ibid.: 28.

This uneasy balance between self-interest and altruism still characterises many aspects of trade union internationalism today, but it is by no means the only balancing act they have to carry out in the twenty-first century. Another challenge is how to weigh up the defence of existing workers, including the gains they have made in any particular location, against the recruitment and organisation of new groups of workers. And, in recruitment drives, determining what the priorities should be: to try to win over those workers who occupy strategic positions in the value chain and who can thus can help to win disputes? Or to respond to the needs of the most vulnerable workers who may be crying out for an organisation to represent their interests and, furthermore, if organised will be less likely to undercut other organised workers? Then there is the challenge of how to respond to employers' globalisation initiatives: is it better to resist them altogether, running the risk of being accused of protectionism? Or to go 'with the grain' of globalisation and try to win the best deal possible for the workforce, running the risk of being accused of selling out the interests of those who lose by this process?

Given that the multinational companies increasingly span the traditional divisions between sectors and between national economies, trade unions also have to decide how to restructure themselves to reflect these new configurations: by sector? by occupation? by company? by regional or national groupings? or by their political affiliations? Other questions relate to the broader political roles of trade unions. How, and to what extent, should they get involved in national and international bodies (exposing themselves to the risk of being accused of co-managing neo-liberal capitalism)? And how, and to what extent, should they get involved in broad-based social campaigns, perhaps in partnership with NGOs (exposing themselves to the risk of being accused of abandoning their duty to prioritise the representation of the direct interests of their members)? In the aftermath of the 2008 crisis, such questions have acquired a new topicality. One factor that has contributed to this has been a change in public attitudes to globalisation.

In the early years of the twenty-first century, it was possible for economic consultants[42] or national governments[43] to argue that globalisation was generally beneficial. Citizens of North America, Europe and the rest of the developed world would, they said, benefited from it partly because of the lower prices of goods manufactured in developing economies and partly because 'their' multinational companies would increase their competitiveness in global markets, which would ultimately lead to the creation of more jobs back home. In the rest of the world, the flow of foreign investment would generate economic growth, new jobs and rising standards of living. This would in turn provide new markets for exports.

Public belief in such benign win-win forecasts was somewhat shaken by the 2008 financial crisis and its aftermath, all too visible in rising unemployment and price rises (especially of food and energy). In addition, rapid economic growth in China, India, Russia, Brazil and other fast-developing economies released huge surpluses which, as they were reinvested elsewhere around the globe,[44] made it abundantly clear that the multinational companies formerly based on their soil were not the exclusive national property of the citizens of Europe and North America, however much these citizens might identify with iconic national brands. In such a context, any idea that national jobs are safe in the hands of national companies became increasingly difficult to sustain. Faith in the long-term stability of global corporations took further knocks from other aspects of the financialisation of capital, in the form of a spate of takeovers of well-known companies by private equity trusts, hedge funds, sovereign-wealth funds, perceived by the general public as seeking only a quick return on their investments, with no long-term commitment even to the future of the brands they have bought, let alone the workers who produce the products sold under these brand names or the citizens of the countries in which they are based.

In combination with other factors, including the increasingly evident effects of global climate change, public opinion appears to be becoming

[42] See, for example, McKinsey Global Institute (2004), *Offshoring: Is It a Win-Win Game?* Accessed on November, 2004 from: http://www.McKinsey.com.

[43] See, for example, Department of Trade and Industry (2004) *Trade and Investment White Paper: Making Globalisation a Force for Good,* London, DTI, November 10.

[44] For a discussion of the mechanics of the way in which accumulation leads to the search for new sites for further investment an accumulation, see Harvey, David (2003) *The New Imperialism,* Oxford: Oxford University Press.

more mistrustful both of multinational corporations and of the national and international government bodies that seem to be promoting their interests. This has given a new impetus to anti-globalisation campaigns and, alongside this, a revival of interest in trade unionism as one of the means that can be used to counter the destructive policies of TNCs. Unfortunately it has sometimes also fuelled new forms of xenophobia, throwing up contradictions reminiscent of those confronting the working class in 1930s Germany, although it must be emphasised that xenophobia is only one of many factors fuelling this change in public attitude.

Added to this is workers' direct experience of the actual impact on their job prospects and working conditions of the global restructuring currently under way. As the financialisation of capital progresses, so too does the pressure on employers to produce dividends for shareholders in the short term and, in a context of increasing global competition, such dividends can often only be produced through downward pressure on the wages and conditions of workers.[45] A clothing factory in Morocco, for example, producing goods for global companies, may only be able to compete effectively with alternative factories in China by casualising its workforce, reducing safety standards and paying below the minimum wage.[46] Multiplied across the world, such effects of globalisation have contributed considerably to the growth in casual and precarious employment which has presented such a challenge for trade union recruitment. Precariousness outside the formal economy has grown in parallel with precariousness within it. Even if their work is not actually outsourced to another company or relocated to another country (or both) workers in an increasingly large range of companies and industries live with the daily fear that it might be. As work is reorganised on the basis of time-limited projects, or outsourced contracts, they may, even though nominally in continuous employment, be required to apply for work within the organisation that employs them on a project by project or contract by contract basis and,

[45] Altvater, E. & B. Mahnkopf (2002) *Globalisierung der Unsicherheit – Arbeit im Schatten, schmutziges Geld und informelle Politik,* Münster: Westfälisches Dampfboot.

[46] Belghazi, S. (2006) in U. Huws, A. Dhudwar, & S. Dahlmann, *The Transformation of Work in a Global Knowledge Economy: Towards a Conceptual Framework*, Proceedings of Conference held in Chania, Greece, 21–22 September, Leuven: Higher Institute of Labour Studies: 247–251.

if repeatedly rejected, find their job security little different from how it would be if they were self-employed.

Solid occupational identities, based on established skills and recognised qualifications (the kind of identity that often formed the basis of traditional trade union allegiances) are increasingly giving way to provisional identities made up of changing configurations of universal 'competences' such as proficiency in particular software packages, knowledge of a particular group of customers, or 'communications skills' 'team skills' or 'ability to multitask'.[47] Instead of being able to see their way forward to a job for life, growing numbers of people now have to negotiate a path through labour markets in the constant fear that they will be seen as only as good as their last job. Like the public sector IT workers whose jobs were outsourced to a global company interviewed in the UK by Simone Dahlmann in 2007,[48] their attitude to their work can be summed up as 'keep your head down, ask for nothing' and just 'hope that you will keep your job for another year'.

There are, of course, many other ways in which globalisation impacts on employment on the ground, both for those who work directly for multinational companies and those in other sectors of the economy. For the former, these include increasing requirements to speak global languages, adapt to foreign corporate cultures and work to time schedules that are set on the opposite side of the globe. For the latter, they include the many indirect effects of global competition, whether this is on food prices, on natural resources, on how goods are manufactured, on tourism, or on the environment, as well as the increasing dominance of local markets by global companies, as well as the effects of new forms of social polarisation, including crime. They also include the effects of migration, both on 'labour exporting' and 'labour importing' regions of the world.[49]

Although critiques of globalisation have risen in the second decade of the twenty-first century, spurring a new interest in trade unionism, this

[47] Huws, U. (2006) 'What Will We Do? The Destruction of Occupational Identities in the "Knowledge-Based Economy"', *Monthly Review,* 57 (8), January.

[48] Huws, U. & S. Dahlmann (2007) 'Global Restructuring of Value Chains and Class Issues', in Proceedings of ISA Conference: *Work and Employment: New Challenges*, Montreal, August 28–30.

[49] Cohen, R. (2006) *Migration and Its Enemies: Global Capital, Migrant Labour and the Nation State,* Aldershot: Ashgate.

has not yet reached a level of critical mass sufficient to tip public policy decisively in the direction of any kind of new deal between capital and labour. Nevertheless, the period has witnessed a growth in militant worker organisation, leading to strikes and other forms of action in many countries across the world. There has, for example, been growing labour unrest in China,[50] while low-paid workers for companies such as Walmart have taken action in the USA.[51] Since 2015, a new wave of trade union organisation has emerged among low-skilled and casually-employed workers who could be regarded as members of the reserve army. These include actions led by existing well-established trade unions, such as the strike by Amazon workers in Poland, Spain and Germany in 2018[52] and that by MacDonald's workers in the UK in 2017.[53] However there have also been initiatives organised by some new trade unions that were formed in the mid-2010s, sometimes as breakaways by militant members of existing organisations, such as the Independent Worker's Union of Great Britain[54] which has organised strikes, *inter alia,* among cycle delivery workers and outsourced cleaning workers, in a wave of action that is in some ways reminiscent of the development of the 'new unionism' of late nineteenth century Britain when, between 1889 and 1893, unskilled workers, like dockers, excluded from the existing unions that admitted only skilled workers (often described by Marxists as the 'labour aristocracy') created new unions to represent their interests.[55]

[50] See, for example, Chan, C. (2016) 'Labor Rights Movements Gaining Momentum in China' *dw.com,* January 5. Accessed on August 24, 2018 from: https://www.dw.com/en/labor-rights-movements-gaining-momentum-in-china/a-18959557.

[51] Caraway, B. (2018) 'Collective Action Frames and the Developing Role of Discursive Practice in Worker Organisation: The Case of OUR Walmart', *Work Organisation, Labour and Globalisation* 12 (1): 7–24.

[52] Reuters Staff (2018) 'Amazon Workers Strike in Germany, Joining Action in Spain and Poland' *Reuters Business News,* July 16. Accessed on August 24, 2018 from: https://www.reuters.com/article/us-amazon-com-germany-strike/amazon-workers-strike-in-germany-joining-action-in-spain-and-poland-idUSKBN1K61OY.

[53] Kollowe, J. & N. Slawson (2017) 'McDonald's Workers to Go on Strike in Britain for First Time', *The Guardian*, September 4. Accessed on August 24, 2018 from: https://www.theguardian.com/business/2017/sep/04/mcdonalds-workers-strike-cambridge-crayford.

[54] https://iwgb.org.uk/.

[55] Matthews, D. (1991) '1889 and All That: New Views on the New Unionism', *International Review of Social History* 36 (1): 24–58.

As in the late nineteenth century, so in the early twenty-first, an uneasy relationship persists between these two groups. And, despite some regroupings on the left, no convincing new political compromise to build a basis for solidarity between them has yet emerged. Yet there are encouraging signs that this may be round the corner.

5

Creative Work Under Capitalism

So far, in discussing what happens to labour under capitalism, I have focussed mainly on the processes whereby it is progressively standardised and simplified—how complex tasks requiring judgement and skill from experienced workers are reconstituted to become repetitive ones that lower-skilled and cheaper workers can be recruited to perform. Harry Braverman memorably called this process the 'degradation of work'.[1] But there is another side to this coin, another aspect of labour without which this degradation could not occur.

No change can take place without innovation, and innovation requires human labour. Whether it involves dreaming up a new way to organise work, developing a new kind of technology, adapting an existing technology for new uses, identifying a new market or a novel way to reach new customers or even just finding an ingenious way to attract new investment, capitalism relies crucially on a kind of labour that can best be described as 'creative'. It requires perpetual expansion for its survival, based on continuous innovation. The great engine of capitalist growth relies on many forms of labour for its fuel. But creative labour is the spark that ignites and

[1] Braverman, H. (1974) *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century,* New York: Monthly Review Press.

U. Huws, *Labour in Contemporary Capitalism*, Dynamics of Virtual Work,
https://doi.org/10.1057/978-1-137-52042-5_5

reignites that engine.[2] To exercise creativity, workers need to be at liberty to imagine new possibilities, to exercise curiosity, to be able to access a wide range of information freely, to have the resources to experiment with new ideas and to 'think outside the box', as the management jargon puts it.

These qualities are the precise opposite of those that capitalism requires from its 'degraded' workers, who are expected to be obedient, unquestioning and rule-following. Degraded workers must, in other words, remain firmly *inside* the boxes into which they have been placed: interchangeable units in global value chains. Yet it is essential for the survival of capitalism that it has both of these kinds of labour—degraded and creative—at its service. This presents something of a dilemma for capitalists. On the one hand they need to control all kinds of labour to the extent that they can be sure that they can own what it produces, discipline it and maximise its productivity. On the other hand, they need something from creative workers that cannot necessarily be predicted in advance or produced on demand. Creative workers may have to be coaxed to part with their good ideas. This raises a challenge for capitalists: how to manage them in such a way that their creativity can flourish so their ideas can be milked and put to the service of capital, while nevertheless ensuring that their very creativity does not lead to a critique of the status quo and forms of rebelliousness that challenge the system they are supposed to be supporting. In short, as I have written elsewhere[3]:

> Creative labour occupies a highly contradictory position in modern, global, 'knowledge-based' economies. On the one hand, companies have to balance their insatiable need for a stream of innovative ideas with the equally strong imperative to gain control over intellectual property and manage a creative workforce. On the other, creative workers have to find a balance between the urge for self-expression and recognition and the need to earn a living. The interplay between these antagonistic imperatives produces a complex set of relations, encompassing a variety of forms both of collusion and of

[2]I used this metaphor in Huws, U. (2007) 'The Spark in the Engine: Creative Workers in a Global Economy', *Work Organisation, Labour and Globalisation,* 1 (1), on which this chapter draws in part.

[3]Huws, U. (2010) 'Expression and Expropriation: The Dialectics of Autonomy and Control in Creative Labour', *Ephemera*, 10 (3/4): 504–521: 504. This article is another source from my already-published work on which this chapter draws.

> conflict between managers, clients and workers, with each action provoking a counter-reaction in a dynamic movement that resembles an elaborate minuet, in which some steps follow formal conventions but new moves are constantly being invented.

One of the reasons the situation is so complex is that capitalists draw on creative labour in many different ways. Indeed, creative workers can be found among all six of the categories of labour analysed in Chapter 2.

The first category in Table 2.1 (subsistence labour) perhaps encompasses the simplest and most unalienated form of creative labour: work that is carried out for its own sake: for the pure pleasure of it, or for its direct use value. William Morris, in his 1890 Utopian novel *News from Nowhere,* set in an imaginary future in which all work is unalienated, described it thus:

> **all** work is now pleasureable; either because of the hope of gain in honour and wealth with which the work is done, which causes pleasurable habit, as in the case with what you may call mechanical work; and lastly (and most of our work is of this kind) because there is conscious sensuous pleasure in the work itself; it is done, that is, by artists.[4]

This kind of unpaid creative work still exists. Even in highly developed economies, people make up songs to sing to their children and stories to tell them, decorate their homes, create home movies on their smartphones, knit clothes, concoct new recipes, come up with innovative solutions to problems they encounter and are creative in innumerable other ways. Everywhere, they may continue the creative traditions of their ancestors, adapting them to new circumstances producing a range of artistic products that may be labelled 'folk', 'indigenous' or 'ethnic' art, 'world' music, 'street style' or simply 'craft' work.

This kind of work is often used by capitalists, though not necessarily paid for. It may, for example, be stolen or copied to be used as the basis for a new line of fashion, furnishing or attention-catching advertising. Where it involves traditional agricultural or medicinal practices these may not only be stolen but also patented so that they become the legal property

[4]Morris, W. (1990) *News from Nowhere,* Chapter 15: 'On the Lack of Incentive to Labour in a Communist Society'. Retrieved, November 2, 2006 from the William Morris Internet Archive, http://www.marxists.org/archive/morris/works/1890/nowhere/chapters/chapter15.htm.

of a corporation, their further use in principle denied to the very people they were originally robbed from. One of the roles that is often asked of other (paid) creative workers is to scout out such material, reappropriate it and find ways to present it as 'cool' and novel. This kind of cultural expropriation can be regarded as a form of 'primitive accumulation' as Marx called it—a theft of the resources which lie outside capitalism for the purposes of generating new commodities.

The second category of labour portrayed in Table 2.1 is servant labour. This too lies outside the direct scope of capitalist relations. Historically, this kind of work was an important source of employment for creative workers, for example the artists who were patronised by aristocratic households, musicians who performed at family weddings and funerals, dressmakers and a range of other workers, from architects to chefs to designers of customised stationery. Creative workers in this category may suffer some constraints on their autonomy in that their work is subject to approval by the clients on whom they are dependent for continuing patronage, but they nevertheless generally have some scope for self-expression and the development of their art. This kind of work still exists too, and may indeed even be increasing in some fields, as growing social polarisation makes it possible for the relatively wealthy to commission bespoke services, not just from traditional types of creative worker but also from newer occupations, such as interior decorators, party planners and producers of wedding videos.

This category may also include work that is not commissioned by anybody but carried out by an artistic worker for its own sake, like the writing of Milton used as an example by Marx. Such work moves from subsistence labour into servant labour if and when it is sold to a private individual (for example a painting or a piece of pottery) and may move to other categories if it is sold to be incorporated into a commodity (such as a published book) or service (such as a concert performance).

Despite this continuing existence, this is a category of work that is under threat from a number of different directions in the maelstrom of restructuring that capitalism is currently undergoing. Some trends were already evident in the twentieth century or even earlier—a period in which creative work shifted between the categories in a number of ways. For example the entertainment industry developed in such a way that jobs were created for

some musicians as employees of bands or orchestras rather than independent performers hired individually on an ad hoc basis.[5] Other branches of the entertainment industries that emerged in this period required large teams working together, creating new forms of employment that provided some sort of continuity for workers, who were also sometimes unionised, exemplified in the Hollywood studio system where set designers, prop-makers and many kinds of film technician working 'below the line' were, in effect, members of 'closed shops' and even actors and screenwriters were often direct employees of the studio.[6] The twentieth century also saw the growth of other types of company employing creative workers such as architects' practices, advertising agencies and publishing companies. When this transition from being directly employed by an individual to being an employee of a company took place, then the workers shifted from servant labour in our classification to capitalist service work. This was the case, for example, when they took up permanent employment in newspaper and publishing companies, broadcasting corporations and architecture practices or temporary employment (often on a freelance basis) in film companies, theatres, orchestras or rock bands. Sometimes the workers became public sector employees, such as those who went to work for what were then generally state-owned broadcasting corporations or public housing development authorities, moving into the category of public service work.

Although many artists were traditionally self-employed or reliant on public or private patronage for their economic survival there were, in other words, a number of niches in twentieth century economies where they could earn an income that enabled economic independence. A lucky minority could make a living from royalties, or performance fees. There were also opportunities for creative workers to supplement their incomes from artistic work by teaching. Labour markets were frequently informal, with recruitment by word of mouth, or (for specialist services such as translation, proof-reading, or sessions music) through small ads in trade

[5]Kraft, J. P. (1996) 'Stage to Studio: Musicians and the Sound Revolution, 1890–1950' in *Studies in Industry and Society*, Baltimore: Johns Hopkins University Press: 9.

[6]See, for example: McKercher, C. & V. Mosco (2006) 'Divided They Stand: Hollywood Unions in the Information Age', *Work Organisation, Labour & Globalisation*, 1 (1): 130–143; Atkinson, W., & K. Randle (2014) '"Sorry Mate, You're Finishing Tonight": A Historical Perspective on Employment Flexibility in the UK Film Industry', *Work Organisation, Labour and Globalisation*, 8 (1): 49–68.

papers or via specialist agencies. For some occupational groups, such as film technicians, trade unions played a role as employment agencies.[7] Apart from the relatively few pockets where permanent employment was available, creative work was typically precarious and low paid, with self-employed workers often having to go for long periods between jobs and seek casual employment in unrelated fields to make ends meet.[8]

Recent developments have put many features of this pattern into question. Industrial restructuring has played a strong role here. Concentration of capital and technological convergence have served to bring together formerly disparate industries within single merged corporate families encompassing music, publishing, broadcasting, film production and distribution, video games and mobile phone apps, seeking to exploit the (digitalised) content of these products across multiple platforms. A further 'digital shift'[9] has changed the balance between formerly vertically-integrated industries producing cultural commodities (such as record companies and book publishers) and the (even larger) companies whose profits come from selling hardware. If, for instance, Apple stands to gain most from selling large numbers of iPhones or iPads, or Amazon large numbers of Kindles, then these companies' aims are not (as those of traditional publishers were) to maximise the income from any given piece of recorded music or eBook but to ensure the widest possible selection of content to encourage their customers to buy the relevant hardware, or upgrade it to increase its capacity. There is much more emphasis on quantity, rather than quality, as well as a greater reworking of existing content, driving a desire to monopolise as much of the supply of this content as possible and purchase it rights-free to maximise the potential for reuse. This changes the business model

[7] Kelly, T. (1966) *A Competitive Cinema,* London: The Institute of Economic Affairs; Reid, I. (2008) *The Persistence of the Internal Labour Market in Changing Circumstances: The British Film Production Industry During and After the Closed Shop*, PhD Thesis, London School of Economics.

[8] See, for example, Hesmondhalgh, D., & S. Baker (2011) '"A Very Complicated Version of Freedom" Conditions and Experiences of Creative Labour in Three Cultural Industries', *Variant*, 41, Spring: 34–38; Banks, M., R. Gill, & S. Taylor (2013) *Theorizing Cultural Work,* Abingdon: Routledge; and Randle, K., & N. Culkin (2009) 'Getting In and Getting On in Hollywood: Freelance Careers in an Uncertain Industry' in A. Mckinlay & C. Smith (eds.) *Creative Labour*, Houndmills: Palgrave Macmillan.

[9] Simon, J.-P., & M. Bogdanowicz (2013) *The Digital Shift in the Media and Content Industries: Policy Brief,* Seville: European Commission, Joint Research Centre Institute for Prospective Technological Studies.

radically, and with it the artist's prospects of earning a decent income from the relevant work.

The size of the corporations that dominate cultural production and distribution, the global nature of their markets, and the digital nature of much of the content they produce, has enabled the development of highly complex value chains in cultural production, in which geographical specialisation coexists with extreme footlooseness. Since the 1990s, for example, publishers based in the UK or North America have sent text-editing work to India or South Africa and the processing of graphs and diagrams to China. Hollywood-based film companies have sourced post-production from Canada, the UK and several Asian destinations.[10] In the Spanish-speaking world, Argentina is a centre for visual special effects, whilst Mexico acts as a Latin American film production hub.[11] Vietnam supplies illustration and animation for Japanese Manga comics and Anime films as well as graphic and website design to European companies.[12] These global value chains are managed much like those for other commodities, involving similar patterns of standardisation (including the use of generic software packages and platforms that constrain the scope for creativity), logging of outputs and pressure to work to global-determined time schedules. The need to compete with workers in low-wage countries has combined with the increasingly universal availability of the skills, to bring sharp downward pressure on earnings in the West. This has been exacerbated by the growing expectation that creative workers, at least at labour market entry level, should be prepared to work in unpaid internships.[13] These developments, whereby creative workers producing content for mass media work directly for large corporations or deliver their mate-

[10] Gurstein, P. (2007) 'Navigating the Seamless Environment in the Global Supply Chain: Implications for Canadian Regions and Workers', *Work Organisation, Labour and Globalisation*, 2 (1): 76–97.

[11] Huws, U. (2014b) 'Shifting Boundaries: Gender, Labor, and New Information and Communication Technology' in C. Carter, L. Stener, & L. McLoughlin (eds.) *Routledge Companion to Media and Gender,* London and New York: Taylor and Francis: 147–156.

[12] Huws, U., & J. Flecker (2004) *Asian Emergence: The World's Back Office?* Brighton: Institute for Employment Studies.

[13] Percival, N., & D. Hesmondhalgh (2014) 'Unpaid Work in the UK Television and Film Industries: Resistance and Changing Attitudes', *European Journal of Communication*, 29 (2): 188–203; Perlin, R. (2012) *Intern Nation: How to Earn Nothing and Learn Little in the Brave New Economy,* London: Verso.

rial to it without any long-term right of reward, shift large quantities of creative labour into the fifth of our categories of labour: capitalist production work. These workers have, in other words, become a direct part of the capitalist commodity production process, where they join a range of other creative workers contributing in other ways to commodity production.

It is perhaps in this fifth category of labour—commodity production—that the contradictory nature of creative work under capitalism is most visible. The management of creative workers is problematic for their employers in several ways that distinguish them from run-of-the-mill employees in production industries or other types of service industry. For one thing, the work is more likely to be episodic or project-based, with a requirement for workers to be taken on for the duration of a specific project (be it—in the case of the twentieth century examples mentioned above—a film, a building, a television series or the run of a play in a theatre) leading to a situation where there is a constant shuffling between the use of workers with direct employment status and freelancers.[14] In a project-based system, even when workers ostensibly have employment status, the need to ensure that they will be hired for the next project leads to an acceptance of long hours, 'time crunch' in periods leading up to deadlines and a reluctance to challenge unfair working practices[15] rendering their working conditions in many respects closer to those of freelancers than secure, permanent employees.

Secondly, unlike those industries where workers gave up any claim to the ownership of their own ideas at the onset of capitalism, most creative industries involve the generation of new intellectual property which can be copyrighted or patented in order to become a commodity that can be sold or rented. For some, this creates an ambivalent relationship with the output of their labour. On the one hand, creative workers want to be identified with the output that they have produced, not just from pride in this achievement but also because being named as its producer may be the only means they have to build a reputation that will lead to further work.

[14] See, for example, Blair, H., S. Grey, & K. Randle (2001) 'Working in Film: Employment in a Project Based Industry', *Personnel Review*, 30 (2): 170–185; Wakso, J. (2003) *How Hollywood Works*, London: Sage.

[15] For an interesting analysis of how this functions in the video games industry, see: Legault, M.-J. (2013) 'IT Firms' Working Time (De)regulation Model: A By-product of Risk Management Strategy and Project-Based Work Management', *Work Organisation, Labour and Globalisation,* 7 (1): 76–94.

On the other hand, the very fact of having produced this thing of value places them in a sharply conflictual relationship with the capitalist who wants to take ownership of it for future exploitation. There is no single model of ownership. In some cases, creative workers (sometimes via their agents, or trade unions) have been able to negotiate deals whereby they share in the ownership of their past products, for example by receiving what is effectively a rental share in the proceeds of the sale by means of a royalty, a repeat fee, a license fee or a 'residual'[16] payment. In others, they have been less successful.

This ambiguity brings into focus in a particularly acute form some of the tensions implicit in Marx's notion of 'alienation' discussed in Chapter 2. Creative work often contains elements of 'really free labour' which is experienced as unalienated—in other words as a form of personal fulfilment.[17] This constitutes a source of genuine satisfaction, creating an additional motive to work that cannot be subsumed into the simple economic motive of earning a living. The worker does not only care about the monetary reward but also about the work's content (or intellectual property) which, even after it has been sold, may still be experienced as in some sense 'owned'—something of which it is possible to be personally proud. This attachment to the work may express itself in the form of a commitment to service users (for instance in education), audiences (for instance in performing arts) or customers (for instance in product design) as well as being linked to concerns about the worker's own personal reputation. In any bargaining process with employers or clients, trade-offs may be made between financial reward and other factors, such as public acknowledgement, a prestigious client or a greater degree of artistic freedom. This makes for a form of negotiation that is complicated in comparison to other employment relationships, and may be disadvantageous to the worker financially, especially in a situation where there is an oversupply of creative labour. The wrench involved in recognising that the ownership of one's own creative output has been lost can therefore be profound.

---

[16] Commonly used in the entertainment industry, 'residual' payments are made when parts of a work or recorded performance are re-used, for example if a song is reused in a film soundtrack.

[17] For a fuller discussion of this, see Sayers, S. (2003) 'Creative Activity and Alienation in Hegel and Marx', *Historical Materialism*, 11 (1): 107–128.

In the forms of labour where workers were direct employees of private corporations or public organisations, a compromise was often negotiated in the twentieth century whereby they traded their ownership of the intellectual property they produced for decent wages and working conditions and job security, sometimes with additional clauses that allowed them to be named as its creators (for example in film credits, byelines or photo acknowledgements). However these practices were mostly restricted to industries in which the final product was a cultural one such as a book, a film or a piece of recorded music.

In the twenty-first century, the digitalisation of information has placed a strain on these forms of partial ownership and attribution that creative workers have long held so dear. Online piracy of intellectual property is rife and publishers and distributors are moving away from the use of royalties in favour or one-off fees to content generators (that is, if they are paid at all). The development of online platforms such as Upwork, Fiverr or PeoplePerHour for commissioning creative work erodes the rights of creators still further. Obliged to compete with other workers in a global online marketplace they are not in a position to negotiate individually with clients but must accept the standard terms and conditions laid down by these platforms. These terms and conditions often include clauses that allow the client not to pay for work deemed unsatisfactory while nevertheless remaining in full possession of the copyright in any commissioned work that has been delivered—in short, a form of wage theft. Apart from the difficulty of negotiating with someone who may be located on a different continent and whose only known identity is a virtual one, workers are kept compliant through the fear of getting a bad customer rating in an environment in which good ratings are the only means of building up a reputation that makes it possible to charge decent rates of pay.[18] Such developments have been reflected in a considerable drop in earnings for creative workers. For example a 2018 study of writers' earnings in the UK carried out by the Authors' Licensing and Collecting Service (ALCS)

[18] For the relationship between customer ratings and earnings on online platforms, see Gandini, A., I. Pais, & D. Beraldo 'Reputation and Trust on Online Labour Markets: The Reputation Economy of Elance', *Work Organisation, Labour and Globalisation,* 10 (1): 27–43.

found that, at a time when 'the creative industries, now valued at £92bn are growing at twice the rate of the UK economy'[19]:

> The median earnings of professional authors have continued to drop since 2005. There has been a fall in writing income in real terms of 42% since 2005, and 15% since 2013. The median income of a professional author is now at under £10,500 a year. The Joseph Rowntree Foundation Minimum Income Standard (MIS), which is the income level considered to be a socially acceptable standard of living for a single person, was £17,900 in 2017. The current minimum wage in the UK for those over 25 is £7.83. For a standard 35-hour week this would mean that professional writers are earning just £5.73 an hour.[20]

The loss of copyright income has therefore not been replaced by other sources. Indeed the change in the basis of payment has served to weaken the position of creative workers in relation to their employers, especially in situations where they are working in isolation from each other and are self-employed, flitting precariously from commission to commission and task to task. In fact the very technological developments that have opened up the possibility of being a media worker to a much wider range of people than ever before has also multiplied the choices available to employers and clients, placing workers more sharply in competition with each other.

Digitalisation has also had the effect of blurring the boundaries between paid and unpaid work. I have already noted how, as in other industries, the history of the media industries can be seen as a history of a transformation of activities carried out unpaid in the home and the community firstly into service industries and then into manufacturing ones. Here, we could look, for example at how domestic music-making was replaced by the employment of professional musicians in bands and orchestras which in turn gave way to the recorded music industry; how community-based unpaid performances, often religious, led to professional theatre which was

---

[19] Singh, S., M. Kretschmer, & A. A. Gavaldon, *2018 Authors' Earnings: A Survey of British Writers,* London: ALCS: 5. Accessed on September 29, 2018 from: https://wp.alcs.co.uk/app/uploads/2018/06/ALCS-Authors-earnings-2018.pdf.

[20] Singh, S., M. Kretschmer, & A. A. Gavaldon, *2018 Authors' Earnings: A Survey of British Writers,* London: ALCS: 4. Accessed on September 29, 2018 from: https://wp.alcs.co.uk/app/uploads/2018/06/ALCS-Authors-earnings-2018.pdf.

followed by drama delivered to its audiences via cinema and television or streamed digitally; and how word-of-mouth gossip and story-telling was supplanted by professional news and fiction-publishing industries, first in print and then on radio, television and online. In these transitions there has been a general tendency for unpaid work to be transformed into paid work. But the introduction of information and communications technologies (ICTs) has also enabled transitions in the opposite direction: the Internet makes it possible for amateurs (or unpaid professionals) to self-publish their own writings, broadcast their own films, distribute their own recorded music and actively contribute to the generation of content. Indeed, user-generated content is crucial to the success of some of the largest and most visible online organisations, including *Wikipedia* and *YouTube,* as well as blogging or photo-sharing sites like *Wordpress*, *Flickr, Tumblr* and *Blogger*. Here, unpaid work displaces, or supplements paid work.

As the same activity morphs unobtrusively between paid and unpaid status, the worker who carries it out slips in and out of 'employment'. The boundaries between paid and unpaid work become permeable, a permeability that is blurred further by the growing practice of using unpaid intern labour alongside paid employment in many media workplaces. The fact that much of this work is carried out willingly and for pleasure, as well as for self-promotion, makes its character as labour opaque.[21]

This fluid boundary between paid and unpaid labour is a reminder that creative work is also involved in the sixth category of work outlined in Chapter 2: consumption work.

The shifting interface between paid and unpaid work and the changing relationship between production and consumption enabled by ICTs has implications for the labour processes and scope for creativity both of paid workers and unpaid consumers. Take, for example, one of the many websites that allows you to 'design' your own garments (such as weddingdresscreator.com). Here, the customer can spend hours trying out different permutations and combinations from a range of standard ingre-

[21] I have discussed these developments in greater depth, focusing particularly on their gender impacts, in Huws, U. (2015) 'Shifting Boundaries: Gender, Labor and New Information and Communication Technology', in C. Carter, L. Steiner, & L. McLaughlin (eds.) *Routledge Companion to Media & Gender*, London: Routledge: 147–157.

dients (in this case, 23 neckline types, 11 midriff types and 16 types of silhouette). As well as saving the time that would otherwise be spent trudging round shopping malls or leafing through catalogues, this can induce a sense of creativity and ownership of the final design in the consumer. But the work of the designer has been reduced to the development of standard interchangeable components, reflecting more general tendencies of standardisation, intensification and requirements to respond to customer demand found across a range of occupations in the creative industries. The same trend can be seen in the design of standard templates for use by bloggers using Wordpress or Blogger: an increased ability for users to achieve professional-looking results accompanying increased pressure for standardisation and reduction in the scope for creativity of the paid designer.

Digitalisation has also enabled other changes. An extra dimension of volatility has now been introduced to the already unstable labour market by the exponential growth of online labour exchanges, also known as 'crowdsourcing' or 'cloudsourcing' platforms, 'peer-to-peer networking', the 'sharing economy', 'gig economy', 'on-demand economy' and other terms.[22] These forms of online intermediation between workers and clients or funders are reshaping labour markets for creative work in three quite distinct ways.

First, there are platforms such as Freelancer and Upwork that provide ways for employers to tap into a global pool of labour without entering into long-term commitments. These can in some ways be seen as online successors of offline predecessors such as directories or agencies, but once these activities have migrated online, qualitative as well as quantitative changes are introduced. Economies of scale enable offerings to be standardised and costs lowered, thus consolidating market dominance. Network effects bolster this consolidation: the larger the platform, the more likely it is to have suppliers in any given location, or for any given activity, so the more customers are likely to use it, driving smaller competitors out of the market. Meanwhile the collection of large quantities of data on users makes it possible to target customers with ever-more sophisticated advertising, across

[22]Huws, U. (2015) *Online Labour Exchanges, or 'Crowdsourcing': Implications for Occupational Safety and Health*, Bilbao: European Occupational Safety and Health Agency.

a range of media, including mobile 'apps', further entrenching the market dominance of the largest platforms.

The scale and reach of these platforms is considerable. As early as February 2015 *Freelancer* advertised over 14.5 million registered users and over 7 million projects with over 22,000 users online at the time the site was accessed.[23] *Elance* merged with *oDesk* in 2013, producing a combined workforce of some 10 million,[24] further enlarged when the merged companies were rebranded in 2015 as *Upwork*. There are large numbers of smaller platforms offering similar services.[25]

A second fast-growing way in which online platforms are being used to reshape labour markets for creative workers is the use of 'crowdfunding' to raise money for albums, films, books, exhibitions or other artistic projects. In 2018 it was estimated that the transaction value of crowdfunding amounted to US$9342 million, with an annual growth rate of 28.8%.[26]

Finally, online platforms have also created new ways to market craft and other physical artistic products. When the largest of these platforms, *Etsy,* went public, in April 2016, it was valued at a record-breaking US$3.3 billion US.[27]

These very different forms of online organisation have some common impacts. While they undoubtedly open up possibilities for creative work to much broader groups of people in many parts of the world, they also

[23] See Huws, U. (2015) *Online Labour Exchanges, or 'Crowdsourcing': Implications for Occupational Safety and Health*, Bilbao: European Occupational Safety and Health Agency.

[24] *The Economist* (2015) 'Freelance Workers Available at a Moment's Notice Will Reshape the Nature of Companies and the Structure of Careers', January 3.

[25] Green, A., M. de Hoyos, S.-A. Barnes, B. Baldauf, & H. Behle (2014) *Exploratory Research on Internet-Enabled Work Exchanges and Employability: Analysis and Synthesis of Qualitative Evidence on Crowdsourcing for Work, Funding and Volunteers,* Seville: EU Science Hub. Accessed on October 3, 2018 from: https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/exploratory-research-internet-enabled-work-exchanges-and-employability-analysis-and; Mandl, I. (2014) European Foundation for the Improvement of Living & Working Conditions, 'Status quo and First Findings on Crowd Employment and ICT Based, Mobile Work', Presentation to Dynamics of Virtual Work (COST Action IS 1202) Meeting, University of Bucharest, March 28, 2014.

[26] Statista (2018) Accessed on October 3, 2018 from: https://www.statista.com/outlook/335/100/crowdfunding/worldwide.

[27] CNN Money (2015) 'Etsy Now Worth Over $3 billion. Stock Jumps 88% After IPO' Stockswatch, April 16. Accessed on August 24, 2015 from: http://money.cnn.com/2015/04/15/investing/etsy-ipo-16-a-share-wall-street/.

have some more ambiguous effects. The value of accumulated past social capital, in the form of personal contacts and word of mouth recommendation, is eroded and, when it still exists, becomes more difficult to renew. Individual workers are obliged to pitch themselves or their work using standard formats which become the basis for competitive comparison, often having to distort the individuality of their offerings in the process. Outright rejection of work or negative ratings by customers (which typically cannot be challenged) become disciplinary instruments; and there is pressure to check for messages round the clock for fear of missing a vital offer of work thus extending the working day.

The role of online platforms in putting creative workers in touch with possible sources of income underlines their fluidity in terms of the categories of labour summarised in Table 2.1. Whilst many platform workers are contributing directly to commodity production, some may be carrying out other forms of labour. However commodity production remains the most important form of labour under capitalism and requires further scrutiny if we are to unravel the complicated dynamics of the relationship between creative workers and capital, and this entails investigating other kinds of creative workers—not just those who contribute to the production of media content or artistic artefacts. When we step beyond the cultural and media industries and delve into the production process of other commodities it becomes apparent that the labour of creative workers in other sectors is much less likely to be individually acknowledged or rewarded by any means other than their salaries (although in some cases companies may offer perks such as share options to favoured employees).

Identifying creative workers in the technical division of labour by which commodities are produced can be difficult. This is partly because each development in that division of labour builds incrementally on what has gone before. Here, it is important to remember that everything we now have, at least everything that is produced within the money economy, whether this is products, processes, infrastructure or 'knowledge', is the result of past creativity. The technical division of labour across an economy is the result of processes of commodification which took place in the past and which continue to evolve. Before the first industrial revolution, for instance, all the functions involved in the production of a piece of cloth might have been carried out, if not by the same person, probably

within the same household, including spinning, dyeing, designing, weaving, quality control, marketing, sales and so on. In industrialised fabric production these tasks may be divided not just between different workers but even between different industries, with a complex geographical division of labour. In the process splits have taken place between mental and manual tasks: between 'head' and 'hands'. Most of the manual tasks have been automated and routinised; the mental ones have been further divided up into 'executive', 'clerical', 'professional' and 'technical' functions. And some of these fall into most people's definitions of 'creative': for instance some of the activities involved in the research and development of new fibres and dyes, the design of new fabrics, the invention of creative ways to market them and various ancilliary activities like designing the textile companies' websites or producing their annual reports. But what is important to remember is that they all have a distant ancestry in the 'craft' of those artisanal textile workers. The same could be said of a myriad other activities.

As already outlined in earlier chapters, the sequence of events can be schematically summarised as follows. In the beginning, we have a worker or group of workers carrying out some task that involves the exercise of skill. Following Michael Polanyi[28] we can describe this skill as 'tacit', a word that describes an ability or facility or knowledge that we have without being able to define precisely what it consists of. Sometimes it may not even be perceived as a skill but as a 'gift' or 'talent' or inherited aptitude. The possession of this tacit knowledge gives these 'skilled' workers some bargaining power in the labour market; nobody else can do what they do, or at least not as well or as quickly. And, of course, the more they have managed to restrict access to this knowledge, the greater will be their ability to insist on high pay or favourable conditions. For their employers, therefore, they constitute something of an obstacle to rapid expansion. In order to cheapen production processes, or rapidly expand production (usually, but not necessarily, involving the mechanisation or automation of all or parts of the process) this tacit knowledge must be codified; that is, it has to be analysed and broken down into its component parts so that these can be turned into a sequence of instructions that can be repli-

[28] Polanyi, M. (1967) *The Tacit Dimension*, Garden City, New York: Doubleday.

cated by less-skilled people or a machine.[29] This stage can also be referred to as standardisation. Codification does not necessarily mean simplification. It can result in highly complicated algorithms, models, databases or programmes requiring abstruse knowledge that is only available to a small highly trained group of workers. Nevertheless, codified knowledge is systematised, rational and calculable.

Once tasks have been standardised, they can be counted easily, because each unit in each stage of the process is essentially the same as others. This makes it possible to specify tasks numerically and to manage workers, not by standing over them and making sure that they are really working, but by measuring their outputs, or pre-defined 'performance indicators'. And, once these outputs have become measurable, a price can be determined for them. No longer an indefinable part of a bundled-together collection of skills and knowledge, they have become separate, quantifiable entities in a division of labour. They have become tradeable. And once work can be managed by results, if those results can be readily transported (whether in the form of physical components or of digitised information that can be transmitted electronically), then there is no longer any need for it to be carried out in the same place, or by the same organisation. This can lead to changes in the division of labour within an organisation (e.g. merging or breaking up traditional structures into separate cost or profit centres, automation of processes, and/or relocating them to other sites) or it can lead to subcontracting certain activities to other organisations. Spatial and contractual restructuring may be combined in many different configurations—for instance a function may be outsourced with a transfer of personnel to an external company, on an adjacent site; it may be relocated in its entirety to another company in another country; it may continue to be carried out on the same site but by employees of a temporary agency or a subcontractor; or it may be carried out by freelancers. A global company may decide to centralise a particular function on a single site in one country or, conversely, to decentralise it to a dispersed network of agents. The point is that once any task has been reduced to standard components, or modules, these modules can be reconfigured in a huge variety of ways, to suit the particular needs of any given organisation at any particular point

[29] Braverman, H. (1974) *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century*, New York: Monthly Review Press.

in time. The greater the degree of standardisation, the greater the scope for reconfiguration, and the more potentially complex the global division of labour, both spatially and contractually.

This is, of course, a highly schematic overview, but it is one that seems to be applicable to the development of all commodities, whether these are goods or services.[30] It is a process which is self-replicating: every time a process becomes standardised, the division of labour becomes more complex; and each time this happens, new processes are required, in order to develop and manage this new division of labour. Each time, a new split between 'head' and 'hands' takes place, some manual jobs are automated out of existence while others become less skilled and more routine, while simultaneously new non-manual jobs are created to manage the machines and the manual workers. Meanwhile, the 'head' jobs are themselves subject to rationalisation and standardisation processes, leading to further sub-divisions. The overall effect is a continuous elaboration of the technical division of labour. In this fracturing, more and more separate steps are involved in the development of any given commodity. If we contemplate how a complex modern commodity, like a laptop computer, is made, it quickly becomes clear that determining what parts of its value have been contributed by what worker would be a task of forensic magnitude—so many fractions of so many standardised processes, so much codified knowledge, extracted from so many workers, living and dead, so many ancillary activities involved in getting it from the germ of an idea to the consumer, are involved. Despite this difficulty of identification, however, each of these workers is contributing something to the overall value of the finished commodity.

It is not just new consumer products that are constantly entering the market as a result of these processes. Their production also involves intermediary inputs in the form of other commodities, including the machinery used to produce them, the infrastructure and services required to make them run, and a range of other business services, each of which, to the extent that it is standardised and capable of being traded at a profit, can also be regarded as a commodity, whether this is the provision of accoun-

[30] I have written at greater length about this in Huws, U. (2003) *The Making of a Cybertariat: Virtual Work in a Real World*, New York: Monthly Review Press.

tancy or an outsourced customer service call centre; an insurance policy or website management; logistics services or market research.

So, where do creative workers fit into this picture? First and most obviously it has to be pointed out that, using a broad definition, some measure of creativity can be said to be involved in just about any tacit process, whether it is recognised as creative or not. Often, indeed, an activity is only appreciated as creative when it has already been replaced by more standardised, automated processes. When skills become obsolete, they usually morph very quickly from the taken-for-granted abilities of the lowly tradesperson into 'creative' crafts carried out as educational stimulation for school children, leisure activities for the idle, therapy for the mentally ill or the manufacture of luxury one-off products for sale to the rich. Suddenly, cooking, embroidery, or making pottery, or ornamental ironwork is no longer just the result of training, or patience or a 'knack' but requires 'talent', 'flair' and 'artistry'.

The results of workers' past creativity is thus the raw material for what we already have. But new creativity is constantly needed at every stage in the process described schematically above. It is needed to analyse what is being done tacitly and imagine how this knowledge can be codified and standardised. It is needed to invent the machines that can replicate it and formulate the instructions to run these machines. It is needed to adapt existing products and processes for new purposes. It is needed to find ways to harvest, and analyse data that can be used to develop new applications of Artificial Intelligence. It is needed to find ways to persuade the old workers to change their ways (or depart peacefully) and to train the new ones. It is needed to devise ways to change the spatial and organisational structures within which work is organised and to manage these structures, and to make sure that all the separate units are communicating with each other. It is needed to persuade people to buy the products and understand how to use them. It is needed to carry out research and invent new products and processes. It is needed to provide content for the exponentially growing (and technologically diversifying) mass media: to educate, entertain and inform the public and cater to their aesthetic and spiritual needs. Finally, it is needed for a number of functions traditionally carried out by governments, ranging from providing health services to waging war.

The emergence of new forms of creative work does, not, of course mean the death of all the old forms. There remain many spaces in the system for lucky individuals to exercise autonomy and gain huge satisfaction from their work, whether this is making music, designing buildings, making films or writing novels. These spaces are, however, becoming more constrained, because of the increasing dominance of a few giant media conglomerates, the bureaucratisation of funding processes, and the sheer pressure of competition.

The creative workers whose efforts are necessary for the continuing development of capitalism—those involved in commodity production—are in an extraordinarily ambiguous position in all this. They are, on the one hand, agents of change. Without new ideas, the whole system would grind to a halt. The expansionary logic underlying capitalism means that it cannot stand still. Failure to innovate means being overtaken, sooner or later, by the competition which means eventual displacement from the market, however apparently successful the product. A constant supply of new ideas is therefore absolutely necessary. On the other hand, in the process of innovation, what preceded it is rendered obsolete. Whether it is visible or not to the creative worker (and often it is), the process of creation is therefore also a process of destruction, sometimes the destruction of another worker's livelihood. Mike Hales[31] has described some of the contradictions that arise here from the perspective of a systems analyst whose job is to redesign other people's labour processes. Having to deal with the knowledge that they may have harmed another person's life chances may also do damage to traditional allegiances and solidarities but it is only one of many challenges creative workers face.

More acute, for many, is the problem, already referred to above, of the ownership of their own ideas. Ideas, unlike words, images or music (which can be copyrighted) and designs (which can be patented) do not form part of any regulated market. Whilst being an 'ideas person' may be your greatest asset, the moment you have communicated that idea to someone else it ceases, legally speaking, to be yours. In parting with it, whether to an existing employer, a potential employer or a client, you are therefore taking the risk that you may not get the credit for it or, indeed,

[31] Hales, M. (1980) *Living Thinkwork: Where Do Labour Processes Come From?* London: Free Association Books.

even be rewarded for it at all. Once others have this idea, your usefulness to them may well be at an end. Even if you are an employee and your employer continues to employ you whilst using your idea, this idea might only have a short shelf-life. If it is a good one, the chances are that it will be quickly and widely copied. If it is bad then it is likely to be dropped. Every idea is therefore like a little grenade, with the capability of damaging the person who throws it as well as making an impact where it is thrown. It is a cliché of the creative industries that you are only as good as your last idea, but, especially in precarious labour markets with a rapid turnover in ideas, this increasingly describes the reality for many workers.

Ideas are not the only assets of creative workers, of course; they also produce intellectual property in forms that can be legally protected by patents and copyright, as well as possessing abundant knowledge, experience and what has come to be known, thanks to Bourdieu, as 'social capital'[32]—reputations and networks of contacts. But, just like the tacit knowledge of artisanal weavers, these too are subject to appropriation, standardisation and incorporation into new commodities. Creative workers are not only the architects of commodification; they are also its victims. 'Knowledge management' practices explicitly target them. They are asked to pool their contacts in common address books; to participate in brainstorming sessions where their ideas are recorded; to write manuals explaining the programmes they have developed; to run training courses for their junior colleagues or 'mentor' them; to share their 'frequently asked questions'; to participate in the development of standard procedures whose descriptions will be incorporated into quality standards, or even outsourcing contracts for others to abide by; to suggest the 'performance indicators' that will be used to determine their future pay and promotion; to place their work in progress or powerpoint presentations onto corporate or university intranets for others to use; and to contribute to the development of 'knowledge databases'.

Three consequences of this development deserve special attention. First, by participating in these practices creative workers are contributing to their own dispensability. By sharing their knowledge they are cheapening it, and rendering themselves more easily replaceable. However, because they rarely

[32] See, for example, Bourdieu, P. (1983) 'Forms of Capital' in J. C. Richards (ed.) *Handbook of Theory and Research for the Sociology of Education,* New York: Greenwood Press.

work alone, but are typically working in teams with an internal division of labour, they cannot afford *not* to share this knowledge. Not only will the quality of the overall product (and hence, perhaps, their personal reputations) be adversely affected if there is poor communication within the team; and not only will they have to do more work if their colleagues don't have the skills to help them out; they also want to learn as well as teach. The exchanges of knowledge that go on within a collaborating group do not just have a synergistic effect in creating a whole that may be greater than the sum of its parts; they can also generate considerable intrinsic job satisfaction for those involved, as well as adding to the resources they can bring to future work. If the workers are insecure about their future employment (as is often the case when people are working on projects with a fixed term), then considerable tension can be generated between the urge to co-operate and the urge to compete.

Second, even if the workers in question have secure employment and have not participated in a process of explaining themselves out of a job, the very process of codifying their knowledge contributes to a change in the quality of their work. As soon as it is embedded in standardised protocols, specified quality standards and performance indicators, the work starts to lose its spontaneity and the workers their autonomy. The very qualities that attracted them to creative work in the first place start to disappear under the weight of daily routines that involve filling in endless time sheets and job sheets, checking boxes to ensure that standard routines have been followed and documenting every step of the work.

Third, the nature of creative work presents particular challenges for managers. Creative workers may be managed differently from other workers, making it difficult for them to follow traditional patterns of resistance to coercive management. The management of creative workers under capitalism does not take a single form. As I have argued at greater length elsewhere[33] it may often mean the coexistence of more than one form of control, involving both sticks and carrots. As already noted, in contemporary capitalism, there is no single standard form of relationship between creative workers and those who pay for their work. They may be paid a salary, a fee, a commission, a royalty or a lump sum for what they produce.

[33]Huws, U. (2010) 'Expression and Expropriation: The Dialectics of Autonomy and Control in Creative Labour', *Ephemera*, 10 (3/4): 504–521.

They may be employees, independent entrepreneurs, freelancers, 'taskers', partners, franchisers or day labourers. Just as there are multiple forms of contractual relationship, there are multiple forms of control. And, to make things even more complicated, these forms of control are not necessarily single or stable; several may co-exist alongside each other, and one may transmute into another.

One of these types is personal control exercised through relationships and obligations between known individuals. This could be a paternalistic form of control exercised through family relationships, for instance in the setting of a family firm, or it could be a more individual form of patronage like that of an aristocrat for a favourite artist. It might be thought that such forms of control are increasingly anachronistic, edged out on the one hand by equal opportunities recruitment and promotion policies and on the other by the impersonal nature of the standardised procedures adopted by global companies for quality-control purposes as well as by public bodies for bureaucratic reasons. Caricatured in the Hollywood 'casting couch' stereotype, this form of control has been associated for many years with the entertainment industries. However, the increasing precariousness of labour markets in these and other 'creative' industries means that it still thrives, encouraged by such practices as the provision of work experience through unpaid internships to keen young creative hopefuls. This form of control is bolstered by gift relationships, the mutual exchange of 'favours' and a complicity in ignoring the formal terms of contracts. It can not only lead subordinated creative workers into situations that are highly exploitative but can also make it impossible to seek recourse if the relationship breaks down. It may also be associated with forms of sexual predation or harassment. The forms of resistance to this type of control that are open to workers are individual and informal: outmanoeuvring the boss, using personal charm or manipulation, using gossip networks to shame and blame, or simply walking away. On the rare occasions that they resort to the law, or public shaming to seek justice, twenty-first century workers challenging these forms of harassment are liable to be subjected to a bombardment of hate messages and even death threats via social media, as became evident in the 2017 #metoo movement.

A second type of control is bureaucratic. This form is exercised through formal and explicit rules, often negotiated with trade unions. It has tradi-

tionally been the dominant form not only in the public sector but also in other large organisations, such as banks. It is associated with hierarchical structures and strict rules of entry, with many of the characteristics of an 'internal labour market'.[34] Here the forms of resistance open to workers include subverting the rules, operating them obstructively or obeying them only minimally (as in the form of trade union action known as 'working to rule') or formally challenging them in order to negotiate improvements that are in workers' interests (for instance by reducing agreed working hours, increasing rewards, lengthening rest breaks etc.).

A third type is the sort of Tayloristic control anatomised by Braverman.[35] In essence, this involves a system of management (and sometimes also of payment) by results. Targets, or quotas may be set individually or for a whole team. In the latter case, simple instrumental rationality is not the only motive to work: workers' solidarity with team-mates may be leveraged as an additional form of motivation. Control may be exerted overtly by a line manager. Or, more insidiously, as Burawoy observed,[36] it may be internalised and become a form of self-exploitation by complicit workers. In an era when targets may be set by external agents (for instance the client company for outsourced services) or embedded in quality standards or the design of software systems, when much work can be monitored electronically, and when teams are provisional and geographically distributed, Tayloristic systems of control may be hard to pin down, with a high degree of internalisation of control by workers and with the source of power often invisible. The most effective form of resistance to Taylorism takes place prior to its introduction, and involves refusal to accept standardisation, demands for more varied work, job rotation or the introduction of various forms of job enrichment or 'human-centred design'.[37] These have rarely been achieved outside some progressive organisations in Nordic countries. Once such standardisation has been introduced, apart from out-and-out sabotage, forms of resistance to Tayloristic management practices include conscious collective efforts by groups of workers to slow down the pace of

[34] Doeringer, P. B., & Piore, M. J. (1971) *Internal Labor Markets and Manpower Analysis*, Lexington, MA: D.C. Heath.

[35] Braverman, H. (1974) *Labor and Monopoly Capital*, New York: Monthly Review Press.

[36] Burawoy, M. (1979) *Manufacturing Consent,* Chicago: University of Chicago Press.

[37] Cooley, M. (1982) *Architect or Bee?* Boston: South End Press.

work in order to gain some time and reduce stress,[38] negotiations over the type and level of targets or performance indicators, and the use of health and safety regulations to try to ensure that stress and speed-up do not reach inhuman levels. Many of these forms of resistance are difficult for creative workers to adopt, because they imply a slow-paced, rule-following work rhythm that may inhibit the forms of creativity that come in sudden bursts. An interesting case here is that of the Californian employees of the video game company Electronic Arts, who (despite the fact that their work involved producing the audio and video content for the company's games) had to prove that their work was *not* 'creative' in order to win a class action suit against their employer to gain a reduction in working hours.[39]

A fourth type of control is control by the market. Unless what they have to offer is exceptionally sought-after, self-employed workers and independent producers have little choice but to offer what their customers want, at the price they are prepared to pay, in the face of competition which, in many industries, is increasingly global. Whilst there may be a degree of scope for individual negotiation in some circumstances, the main form of resistance here lies in the creation of professional associations, guilds or trade unions in which suppliers combine with each other in order to try to set out basic ground rules and avoid undercutting each other in a race to the bottom in which everyone loses. Actors, writers and photographers are examples of groups that have achieved this, to some extent. However in any such grouping there is always a tension between competition and collaboration; between the urge to become a star no matter what the cost, and the compensations of solidarity. Insofar as it is successful, this kind of resistance strategy can lead to another form of control, exercised through the membership of such associations, which might be called peer or professional control.[40] In some cases, self-regulating professional bodies, such as those that represent lawyers and doctors, have managed to institutionalise such forms of control with sufficient success to enable them to become embedded in national or even international regulations. With forceful sanctions,

[38] Beynon, H. (1975) *Working for Ford,* Wakefield: E.P. Publishing.

[39] Schumacher, L. (2006) 'Immaterial Fordism: The Paradox of Game Industry Labour', *Work Organisation, Labour and Globalisation,* 1 (1): 144–155.

[40] Sometimes exercised in a tacit way through 'communities of practice'.

including the right to exclude transgressing members from practicing their professions, many such organisations exert considerable power. Even these, however, are currently under threat of modification, if not erosion, from the commodification of knowledge.[41]

Each form of control evokes a different form of resistance. A defensive response that is appropriate to one form of management aggression may be futile or even counter-productive if it is adopted in relation to another. For instance in a situation where workers are obliged to work excessively long hours, invoking an official regulation that limits the working week (an appropriate response in a situation of bureaucratic control) will have little effect if workers are paid only if they meet certain targets (a Tayloristic form of control) or if they believe that they will bring disgrace on their family firm if they leave a job unfinished (a personal form of control) or if they know that their reputation depends on completing it on time (a market form of control).

When several forms of control exist alongside each other, the contradictory pressures on workers may be so great that they are often disempowered from adopting any effective form of resistance. Instead, they may only be able to respond by becoming physically or mentally ill, letting their families take the strain, or abstaining from any form of adult family life altogether and becoming infantilised,[42] burning out, dropping out, striking a pose of cynical anomie, indulging in isolated acts of 'letting off steam' or sabotage or adopting a ruthless 'devil take the hindmost' attitude that may involve trampling on the interests of fellow workers.

We can conclude that, for capital, there is a contradiction between, on the one hand, the need for a continuous (but dispensable) supply of new ideas and talent in order to fuel its accumulation process and, on the other, the need to control these processes tightly in order to maximise efficiency and profit and appropriate workers' intellectual property so that companies are able to trade freely in the resulting commodities. On the side of labour, there is the urge by individual workers to do something meaningful in life, to make a mark on the world, to be recognised and

[41] Leys, C. (2003) *Market-Driven Politics: Neoliberal Democracy and the Public Interest*, London: Verso.

[42] Steinko, A. F. (2006) 'Rethinking Progressive and Conservative Values: Spain's New Economy Workers and Their Values', *Work Organisation, Labour and Globalisation*, 1 (1).

appreciated and respected, on the one hand, and, on the other, the need for a subsistence income, the ability to plan ahead and some spare time to spend with loved ones. This may be experienced as a contradiction between a drive for autonomy and a search for security.

The challenge for managers is how to control the volatile creative workforce without stopping the flow of new ideas. How can they manage the risk that many of these ideas may be duds? How can they generate an impression that they have provided a funky, fun place to work whilst making sure that productivity stays high? At what point does the coop become so confining that the geese stop laying the golden eggs?

But this development also creates enormous dilemmas for creative workers themselves. Starting from an urge to express themselves or create something meaningful or beautiful, they may be motivated to give their all to the task in hand. But every extra contribution they make may involve a further degree of self-exploitation—in terms of putting in extra time, accepting lower pay or poorer conditions, or handing over their knowledge in ways that may contribute, either directly or indirectly, to constructing new bars for their own cages, or those of others.

At its harshest, the deal they are offered on the labour market can come perilously close to that of the mother brought before Solomon to decide the fate of her baby: give up the thing you love, the product of your own creation, to someone else, or see it maimed or killed. It is a vivid example of the sort of alienation attributed to proletarian workers by Karl Marx.

The eager young people flocking to enter creative jobs doubtless have a range of different reactions to this situation. Compared with their parents, or their less adventurous schoolmates, many will undoubtedly feel that they have won a better and freer lifestyle. And they may well attribute to personal inadequacy or bad luck some of the negative experiences they have on the labour market. Yet they are intelligent, educated, critical people with a wide knowledge of the world and an overview of the processes they are involved in. They have to be, because it is precisely for these qualities that they are recruited. Innovation can only come from 'thinking outside the box'. And employers are aware of this. But the imperatives of expansion in a context of competitiveness and rapid change impel them, willy nilly, to embark on precisely those processes that involve putting people *into* boxes.

What happens in the minds and imaginations of creative people in the process of being inserted uncomfortably into those boxes is vitally important, not just for their own futures but for those of the organisations for which they work and, more generally, for the future of society as a whole. Will they resist and start to peck at the hands that feed them? And if they do, will this resistance have any effect? Or will they simply be discarded and replaced by the next wave of starry-eyed youngsters? If they don't actively resist, will they actively co-operate and hasten the commodification process with all the waste and environmental destruction that entails? Will they subside into a cynical semi-acceptance that guarantees them some personal security but does at least offer some passive resistance to the worst excesses of the market? Or will they transfer their energy and originality and idealism to other arenas—outside the boxes—and contribute to the project of imagining and designing alternative social and economic models?

6

Commodification of Public Services

In Chapter 3, I described how capitalism, in its voracious appetite for expansion, is engaged in a constant quest for new sources of raw materials and new markets. As part of this process it also needs new products to make and new workforces to make them. In a self-enforcing cycle, these new workforces use their wages to generate new consumer markets for the new products, and the profits that accumulate from these processes are invested in the development of infrastructure, the acquisition of more raw materials, research and development and other speculations which, in turn, provide the basis for opening up even more fields for expansion.

This expansion is usually thought of in spatial terms, often pictured historically as an epic quest by heroic adventurers into unknown wildernesses from which, if they were lucky, they would return with the makings of new fortunes and the foundations of new industries—gold, rubber, furs, tobacco or oil, to name but a few. After a couple of centuries of such activities, there are few parts of the globe left where the soil has not been probed for its mineral content, the vegetation examined for what it can yield in the way of food, drugs or building materials, and the population drawn into the economy in such a way that survival without money is impossible.

U. Huws, *Labour in Contemporary Capitalism*, Dynamics of Virtual Work,
https://doi.org/10.1057/978-1-137-52042-5_6

But capitalism does not just colonise new spatial territories. It also invades other aspects of life, seeking out activities that can be turned into commodities to feed its growth. This chapter looks at a particular area of life that is currently undergoing this commodification process: the welfare state.

The last chapter looked in particular at creative labour and how it has shifted from category to category in my typology of labour as capitalism has evolved, first sought out as a source of innovation and then discarded or pushed into submission once its ideas have been milked.

This chapter turns its attention to a large category of workers whose position is being rapidly changed in the current phase of capitalist development as a result of the process of commodification, described in Chapter 3, whereby capitalism expands by extending its tentacles into new areas of life previously outside its scope. The area of life I will discuss in this chapter[1] is the provision of public services—precisely those services that, in the 'golden age' of capitalism, described in Chapter 4, workers' organisations fought so hard to bring into being, as part of that great compromise that protected the working class by guaranteeing basic universal standards of living to prevent the most vulnerable falling into extreme poverty and thereby ensured a minimal level of social cohesion. This post-war compromise was not as stable as it appeared. It began to unravel during the 1970s, as the boom of the previous years petered out, triggering a crisis of profitability that was exacerbated by a series of other events, including the US withdrawal from the Bretton Woods Accord (which triggered unpredictable currency fluctuations and a depreciation of the dollar) and the 1973 'oil shock'. This opened up a period of intensified conflict between capital and labour, with an increase in strike action and other forms of worker militancy. In some countries this brought about something of a crisis of social democracy when social-democratic governments found themselves holding down wages and cutting public expenditure against the wishes of many of the trade unions that gave them their support and legitimacy.

[1]This chapter draws inter alia on previously published material, in particular Huws, U. (2008) 'The New Gold Rush: Corporate Power and the Commodification of Public Sector Work', *Work Organisation, Labour and Globalisation*, 2 (2): 1–8 and Huws, U. (2012) 'Crisis as Capitalist Opportunity: New Accumulation Through Public Service Commodification', *Socialist Register*, 48: 64–84.

By the end of the decade it was clear that the uneasy tripartite relationship between national governments, trade unions and capitalists that had held the welfare capitalism compromise together since the end of World War II was coming apart. The stage was set for a new, overtly aggressive neo-liberal form of politics that was openly pro-capitalist, anti-worker and anti-welfare to enter the scene. Its arrival was announced by the election of Margaret Thatcher as UK prime minister in 1979 and Ronald Reagan as US president in 1981.

On their watch a new wave of capital accumulation was launched, enabling capitalists to expand using the classic strategy that Marx called 'primitive accumulation' but this time not so much a conquering of virgin territory as a recapturing of activities that had previously been decommodified, in a kind of 'secondary primitive accumulation'.[2] This reappropriation was, in other words, based not so much on the kinds of spatial expansion that had taken place in the past but on the commodification of public services. In this commodification process activities already carried out in the paid economy for their use value (such as education and health care), which had expanded as part of the post-war settlement were brought within the scope of private corporate management. In order to achieve this, they had to be standardised in such a way that they could be traded for profit and appropriated by capital: their use value thereby acquired exchange value.

This particular form of accumulation was not based on the expropriation of nature, of unalienated aspects of life, or of unpaid domestic labour (although all these things were also taking place), but of the results of past struggles by workers for the redistribution of surplus value in the form of universal public services. It thus constituted a *re*appropriation rather than a new, or primary, appropriation, and, as such, its impacts on working-class life were multiple and pernicious. For the workers actually delivering public services, new forms of alienation were introduced and there was a general deterioration in working conditions. However, there were also larger implications for workers in other sectors, because public sector workers were, in most developed economies, the strongest bastion of trade union strength and decent working conditions, setting the stan-

[2] Huws, U. (2012) 'Crisis as Capitalist Opportunity: New Accumulation Through Public Service Commodification', *Socialist Register*, 48: 64.

dards for other workers to aspire to. This meant that the erosion of the bargaining position of public sector workers also represented a defeat for *all* workers in their capacities *as* workers. At an even more general level, past gains were snatched from the working class as a whole (including children, the elderly, the sick and the unemployed).

In the early 1980s, the Thatcher government in the UK pioneered two distinctively different forms of privatisation. One of these was the direct sale of public assets, originally promoted as sales to individual citizens rather than to companies. The most high-profile of these were the sales of council houses to their tenants and, starting in 1984, of public utilities—telecommunications, gas and electricity—via widely-publicised share issues, which the general public were invited to buy. Associated with the latter, though less well publicised, was the opening up of telecommunications and energy markets to competition from private companies. The other form of privatisation (not involving a total change of ownership) was the government-enforced introduction of 'compulsory competitive tendering', first into local government and then into the National Health Service (NHS). While this did not necessarily mean that the services in question had to be carried out by external contractors, in-house government departments, employing public servants, were now obliged to compete with private companies in order to be able to continue providing the service in question. This brought downward pressure on wages and conditions and introduced a new precariousness: jobs were no longer necessarily 'for life' but only guaranteed for the duration of the contract.

This first swathe of competitive tendering involved mainly manual tasks such as construction work, waste disposal and cleaning, perhaps not coincidentally also the areas where public sector unions were strong and had demonstrated this strength in the widespread strikes of the 'winter of discontent' of 1978–1979 that directly preceded Thatcher's election victory.

Much of the rhetoric surrounding this enforced outsourcing centred, not just on the supposed efficiencies that would be gained through the delivery of services by private companies, unconstrained by the 'restrictive practices' of public sector manual unions, but also on a discourse of 'enterprise': the external provision of these services, it was claimed, would create openings for new small firms. In reality, the majority of the contracts went to large, often multinational companies. In 1984–1985, for

instance, whilst public attention in the UK was focused on the national strike by coal miners—the other group of organised workers directly targeted by Thatcher's Tories—another long-running strike was taking place at Barking Hospital in East London. The striking cleaners at this hospital were employed by a subsidiary of the Pritchards Services Group, a transnational corporation with 58 subsidiaries in 15 countries, employing 17,000 people in 430 hospitals worldwide, including Saudi Arabia, South Africa, New Zealand, France, Germany and the USA.[3] Interestingly enough, from 1983 to 1994, Thatcher's husband, Denis, was vice-chairman of Attwoods plc, another large international company, this time in the field of waste management, which stood to gain from precisely this form of privatisation.

However the cost implications for the state were actually negative. Whilst neo-liberal proponents of the policy (in the World Bank, IMF, and OECD as well as the UK Government) were claiming that the policy would bring savings of 20–25%, in reality the savings averaged only 6.5%. In one study of 39 UK local authorities, this amounted to an estimated £16 million. However the estimated total public costs (taking into account lost national insurance contributions and the cost of related unemployment benefit) were estimated at £41 million (of which £32 million was accounted for by women's employment). Extrapolated to a national level, this was estimated at savings of £124 million and losses of £250 million, leading to a net national loss of £126 million.[4] In other words, so long as private firms benefitted, it did not matter that there was a net loss to the government. Such findings did little to dent the 'common sense' view that privatisation and outsourcing were efficient.

Each of these forms of privatisation found in the UK had parallels elsewhere. In Europe, the British government played an important role in pushing through a liberalisation agenda that led to the compulsory selling off, first of national telecommunications providers, then of publicly-owned energy companies and the opening up of postal services to the market. There had been EU regulation of public procurement since 1966 (in Directive 66/683, which prohibited rules favouring national suppliers over foreign ones within the single European Market). The turn to neo-

[3] Huws, U. (1985) 'A Very Ordinary Picket', *New Socialist*, January: 8–10.

[4] Equal Opportunities Commission, *The Gender Impact of CCT in Local Government*, Manchester: Equal Opportunities Commission, 1995.

liberalism brought much broader deregulation in the mid-1980s. The Single European Act of 1986 introduced a new regime in which open tendering procedures were established as the norm for all public supplies in the EU and negotiated procedures were allowed only in exceptional circumstances. The first Utilities Directive (90/351) removed market access barriers to energy, telecommunications, transport and water, and in 1992 the Services Directive (92/50) extended the principles that had governed the procurement of goods, works and public utilities to public services more generally.[5]

Meanwhile, the Uruguay Round of the GATT, which commenced in 1986 and culminated in GATT 1994, brought services (along with capital and intellectual property) within the scope of global trade agreements. 1992, the year in which the International Telecommunications Union (ITU) was established, initiated an era of global telecommunications deregulation which in turn opened up the enabling infrastructure for cheap global transfer of digitised information. This was also the year in which India was able to start exporting its software services freely, through the removal of export barriers that had originally been designed to protect an indigenous industry as part of an import-substitution strategy. In the early 1990s, the stage was therefore set for global companies to provide a range of services across national borders, bulldozing their way through any restrictions that might have been set up in the past to protect national companies or local workforces. Many of these companies, nicknamed a 'new breed of multinationals' by UNCTAD in 2004,[6] having already built up expertise in providing standardised services to corporate clients, now turned their attention to the public sector, which represented a huge potential field for expansion. In most developed countries, the public sector was the single largest employer.

[5] Subsequently, this process culminated in the 2006 Services Directive (2006/123), which came into force on December 28, 2009, effectively removing any national barriers within the EU to companies wishing to tender for public services.

[6] UNCTAD (2004) *World Investment Report 2004: The Shift Towards Services*, New York and Geneva: United Nations.

In the UK, for example public sector employment[7] had reached nearly 30% of the total workforce by 1977,[8] a workforce that employed proportionally more women than men.[9] In 1981, public spending in the UK reached an all-time high of 51.2% of GDP.[10] But, thanks to privatisation, this was about to change. By 2012, UK public sector employment had fallen below 20% of all employment, the lowest share for 50 years.[11] This represented a major recommodification of what had previously been decommodified, resulting in a large shift of labour from public service work to capitalist service work in the typology presented in Table 2.1 in Chapter 2. In some cases, especially when the decline in public sector employment was the result of general cuts in public funding as well as outsourcing, its effects could also be felt in a transfer of public service work back to subsistence labour, with individuals having to carry out unpaid reproductive labour to make up for shortfalls in public provision.

Because it included a large number of care workers and clerical workers, the public sector workforce was disproportionately female. In 1979, men made up 54% of the UK public sector workforce, compared with 65% in the private sector.[12] It was therefore not surprising that a detailed study of the impact of Compulsory Competitive Tendering in Local Government in the UK carried out in 1993–1994 concluded that women were much more adversely affected than men, with female employment in local government declining by 22% compared with 12% for male employment, as well as a much steeper decline in earnings for women than for men. Nevertheless, a large number of male jobs were outsourced too. By 1997,

[7]Note the definition of 'public sector' used here *excludes* some groups, such as General Practitioners working for the National Health Service, University employees and outsourced workers, because they are not direct government employees, even though they are paid from public funds.

[8]Cribb, J., Disney, R., & Sibieta, L. (2014) *The Public Sector Workforce: Past, Present and Future*, IFS Briefing Note BN145, London: Institute for Fiscal Studies: 7.

[9]In 1979, men made up 54% of the UK public sector workforce, compared with 65% in the private sector. By 1997, the proportion of men in the public sector had fallen further to just 38%, compared with 58% in the private sector (Cribb, Disney & Sibieta, 2014: 17).

[10]Trading Economics (2018) *United Kingdom Government Spending to GDP.* Accessed on October 1, 2018 from: https://tradingeconomics.com/united-kingdom/government-spending-to-gdp.

[11]Cribb, J., Disney, R., & Sibieta, L. (2014), *The Public Sector Workforce: Past, Present and Future*, IFS Briefing Note BN145, London: Institute for Fiscal Studies: 9.

[12]Cribb, J., Disney, R., & Sibieta, L. (2014) *The Public Sector Workforce: Past, Present and Future*, IFS Briefing Note BN145, London: Institute for Fiscal Studies: 17.

the proportion of men in the public sector had fallen further to just 38%, compared with 58% in the private sector.[13]

Much of this reduction in public sector employment was achieved at first as a result of the wave of privatisations that took place under the Thatcher government during the 1980s, and which still continues. Later, increasingly, they came about more stealthily, as a result of the outsourcing of public service functions to private companies. By 2008 it was estimated that outsourced public services accounted for nearly 6% of GDP in the UK, employing over 1.2 million people—an increase of 126% since 1996.[14] Since then it has grown further. A National Audit Office report on four major contractors estimated that in 2012–2013 Atos obtained £0.7 billion of its worldwide revenue of £7.2 billion from UK public sector and central government sources. The comparable figures for Capita were £1.1 billion from a global total of £3.4 billion; for G4S, £0.6 billion from a global total of £8 billion and for Serco, £1.2 billion from a global total of £4.9 billion.[15]

Many employees ended up working for such companies by being transferred, along with the contract, from their former public sector jobs. For example Capita's UK workforce included in 2012 35,800 workers transferred from public employment compared with 18,840 who were hired directly.[16] Although, at least in Europe, when such transfers take place, working conditions are notionally protected by the conditions of the Transfer of Undertakings (Protection of Employment) regulations (TUPE), qualitative research[17] suggests that there is often a progressive deterioration in job security and working conditions, especially after the expiry of the original contract and its replacement by a second or third, and in situations where the outsourcing unit is subject to mergers or takeovers.

---

[13] Ibid.

[14] Julius, D. (2008) *Public Services Industry Review*, London: Department for Business Enterprise and Regulatory Reform.

[15] National Audit Office (2013) *The Role of Major Contractors in the Delivery of Public Services*, Memorandum for Parliament, HC 810 Session 2013–14, November 12: 5.

[16] National Audit Office (2013) *The Role of Major Contractors in the Delivery of Public Services*, Memorandum for Parliament, HC 810 Session 2013–14, November 12: 58.

[17] See, for instance, Dahlmann, S. (2008) 'The End of the Road, No More Walking in Dead Men Shoes: IT Professionals' Experience of Being Outsourced to the Private Sector', *Work Organisation, Labour and Globalisation*, 2 (2): 148–161.

Digital technologies have played an important enabling role in this development. During the 1990s, digitalisation was used to standardise and simplify many tasks with informational content, making it possible for them to be relocated and/or outsourced, leading to the development of a global division of labour in work involving the processing of information or its transmission by telecommunications, such as IT support, call centre work or processing financial information. Standardisation is a key prerequisite for commodification, transforming tasks that may once have involved hard-to-define tacit skills into units of exchange in a global market. Whether a process involves the delivery of health care, education or any other public service, the process of transforming it into a tradeable commodity passes through the same stages: standardisation, the creation of demand, persuading the workforce to accept the changes and the transfer of risk.[18] During the 1990s the progressive application of these principles to public services, endorsed enthusiastically by many social democratic as well as conservative governments, played an important role in creating a new common sense, whereby it was seen as both natural and inevitable that norms were set by the market. In the case of complex personal services (such as teaching, nursing or social work) involving a large body of contextual and tacit knowledge, communication skill and 'emotional work',[19] the standardisation processes that underpin commodification were by no means easy to achieve. Indeed, this process is still underway in many services, involving a large number of progressive steps during the course of which: tacit knowledge is progressively codified; tasks are standardised; output measures are agreed; management processes are reorganised; organisations are broken down into their constituent parts; these constituent parts are formalised, sometimes as separate legal entities; and market-like relationships are introduced between them. All this may well be preparatory to a change of ownership or an opening up for external tender. Only when the activity has been actually or potentially transformed into something that can be made or sold by a profit-making enterprise is the ground prepared for further restructuring in ways that form part of the normal practices of multinational companies: mergers, acquisitions, reconfigura-

[18] C. Leys (2003) *Market-Driven Politics*, London: Verso.

[19] A. Hochschild (1983) *The Managed Heart: The Commercialization of Human Feeling*, Berkeley: University of California Press.

tion of parts in new combinations and the introduction of a global division of labour. The decade from 1997 to 2007 saw these standardisation and internationalisation processes proceeding apace.

By 2000, an enormous new array of global protocols and quality standards had been put into place. These included the International Standardization Organization (ISO) quality standards.[20] In 2010 alone, the ISO published 1313 new standards and had a further 1900 new standards under development. In 2018, 22,396 standards were listed in its online catalogue.[21] Such standards play an increasingly important role in the development of specifications for service level agreements (SLAs) and remote management, by setting down clear, transparent protocols and expectations for all the processes involved. The development of international standards for processes has run in parallel with the growth in standard certification of skills. To give just one example, it can be noted that a single Microsoft certificate, the Microsoft Certified Professional (MCP) was held in spring, 2011 by 2,296,561 workers around the world. The development of such international qualifications has proceeded in parallel with a more general trend towards certifying skills and increasing transparency in order to encourage the transferability of standards.

As the tasks became more generic, it was possible for the multinational companies that grew up to supply such services to provide them to public sector clients, as well as private sector ones. This led to a whole range of previously public tasks, ranging from checking the criminal records of applicants for jobs working with children to processing parking fines, being outsourced to private companies. Digital technologies also made it possible to develop new forms of work organisation whereby workers could be tightly tracked and managed, even if they were performing manual tasks that had to be carried out on the spot and were not susceptible to relocation to remote sites. Again, this made it possible for large international

[20]The International Organization for Standardization, which has 2700 technical committees, subcommittees and working groups, sets international technical standards for a large range of different industrial processes. The existence of these standards means that it is possible to trade with, or outsource to, an ISO-certified company in the confidence that the outputs will be predictable and standardized, removing the need for detailed supervision, in just the same way that, for instance, electrical standards make it possible to plug an appliance into a standard socket in the confidence that it will function correctly.

[21]https://www.iso.org/standards-catalogue/.

companies with experience in managing teams of manual workers—often on a 'just-in-time' basis—to offer their services to the public sector. Hospital porters, housing maintenance staff, care assistants and cleaners are just a few of the categories involved here.

The experience of being transferred from public to private employment also entails a change in work culture—from one with a motivation to meet the needs of clients to one where the goal is meeting targets and maximising profitability.[22] This conflict of motivation leads to the sense of alienation that characterises the condition of labour under capitalism, in which what workers value about the work is appropriated and used against them. This is especially the case when the sense of commitment to the work leads workers to go beyond the terms of their job description or work extra hours for which they are not paid in order to honour their commitment to their clients, for example when a care worker cannot bring herself to leave a vulnerable elderly client without completing a service which takes longer than the allotted time for the visit. The stresses this causes for workers become extreme in a context of lack of resources. The altruistic impetus to help the client comes into headlong collision with the employer-set imperative to maximise productivity and meet performance targets. In the context of contracts set within neo-liberal government policies aimed at minimising welfare spending, this can morph into practices that are actively harmful to welfare clients, such as the setting of targets for 'sanctioning' (withdrawal of benefits) from claimants imposed on UK Jobcentre staff.[23]

Whether still employed in the public sector or facing transfer to a private company, many public sector workers are experiencing similar changes in their working patterns to those of their counterparts in private organisations: standardisation of tasks; the introduction of performance measures, often set by targets inscribed in contracts; insertion into global sourcing chains; the integration of workers into the disciplinary structures

[22] Dahlmann, S. (2008), 'The End of the Road, No More Walking in Dead Men Shoes: IT Professionals' Experience of Being Outsourced to the Private Sector', *Work Organisation, Labour and Globalisation*, 2 (2): 148–161.

[23] Butler, P. (2015) 'Sanctions: Staff Pressured to Penalise Benefit Claimants, Says Union', *The Guardian*, February 3. Accessed on October 6, 2018 from: https://www.theguardian.com/society/patrick-butler-cuts-blog/2015/feb/03/sanctions-staff-pressured-to-penalise-benefit-claimants-says-union.

and time regimes of external organisations; increasing requirements to use online systems for logging work and self-service access to administrative functions; and growing precariousness, with job security increasingly likely to be linked to the lifetime of a particular project or contract.

There has, in other words, been considerable convergence between the ways that work is organised in the formerly distinct fields of public sector organisations and private companies. Although both were classified in the latter part of the twentieth century as 'primary' or 'internal' or 'firm' labour markets,[24] their organisational structures, cultures and means of progression were traditionally quite different, with the former characterised by rule-bound hierarchical structures, staffed by public servants (often referred to as 'officers', reflecting military models of organisation) and requiring formal examinations for entry and progression. The latter were more heterogeneous in their cultures, some strongly paternalistic and others more meritocratic, but nevertheless typically offering their employees a strong 'brand' to identify with, with loyalty rewarded by long-term commitment. The commodification of public services, both in the steps that take place prior to outsourcing in order to standardise the processes and make them fit for transfer and in those that occur after the outsourcing has taken place, serves to blur such distinctions and reduce the work to a lowest-common-denominator condition that makes it easy to integrate into the capitalist mode of production.

In addition to the quantitative impacts, that make public services more and more difficult to access, the recommodification of public services thus has qualitative impacts that directly contradict the intentions embodied in the original political project of decommodification. This represents something of a double whammy for the broader working class. On the one hand, the services that were campaigned for in the mid-twentieth century by their grandparents and great-grandparents are eroded; on the other, there is a general lowering of employment standards. This general deterioration in wages and conditions results from the fact that, during the period (beginning at the end of the 1970s) when neo-liberal governments, such as those led by Thatcher and Reagan, were attacking the trade union rights of private sector workers, unionised public sector workers, although not nec-

[24]Doeringer, P. B. & Piore, M. J. (1971) *Internal Labor Markets and Manpower Analysis*, Massachusetts: D.C. Heath and Company.

essarily as well paid as their counterparts working directly for capitalists, were able to negotiate working conditions that were in many ways better, setting standards for others to follow for such things as maternity rights, compassionate leave, paid holidays and decent pensions. Many workers consciously chose to work in the public sector partly because it gave them a better work-life balance and more job security than private sector work but also because they liked the idea that they were working for the benefit of the public, not to make a profit for shareholders. In other words they enjoyed the fact that they were, in Marx's terminology, producing use values directly for their clients, without these use values being compromised by being incorporated into exchange values: they could, in other words, be regarded, to varying degrees, as altruists.

Once transferred to the private sector, such altruistic workers may make disgruntled employees, refusing to acquire the 'lean and mean' attitudes that command respect in the multinational companies for which they now work, but, to the company, this does not much matter. Once their expertise has been acquired and codified, they can be replaced by a younger, more malleable workforce, grateful for whatever security it can get. In the UK, the Labour government did provide some protection for second-generation employees in outsourced public services in the 1990s,[25] with a 'two-tier' code on terms and conditions in outsourced services that ensured that new employees working alongside former public sector workers received the same pay and pensions. However, this code was withdrawn in December 2010 by the incoming Coalition government. A comparison of working conditions in the same occupations in the public, private and voluntary sectors in the UK at that time, using data from the Labour Force Survey, found that in each case conditions were worse in the private sector. For instance, only 3% of prison officers in the public sector had job tenure of less than a year compared with 11% of those in the private sector and 10% of full-time healthcare and personal service workers in the private sector worked more than 48 hours per week compared with only 2% in the public sector.[26] Once the knowledge of former public sector

[25]H. Reed (2011) *The Shrinking State: Why the Rush to Outsource Threatens Our Public Services*, London: A report for Unite by Landman Economics: 13.

[26]H. Reed (2011) *The Shrinking State: Why the Rush to Outsource Threatens Our Public Services*, London: A report for Unite by Landman Economics: 18.

workers has been stripped and coded and placed in standard databases it can not only be transferred to cheaper employees, it can also be used as an asset by the new employer. For instance, a company that has already gained the experience of running a local government helpline, managing the HR system of a university, supplying the IT for managing a tax system or providing the laundry service for a hospital is then able to market this service aggressively to other potential public customers, in other regions or countries. Commodified workers' knowledge thus provides the raw material for further capitalist expansion.

In the process, more and more workers join the ever-expanding core of the capitalist workforce, locked into the antagonistic knot described by Marx in his labour theory of value—slipping out of public service work into capitalist service work and capitalist production work in our typology of labour. If workers are to claw back any returns for the working class from this current great wave of accumulation (based as it is on the expropriation of their own past collective efforts at redistribution), new forms of organisation will be required: forms of organisation that recognise the common interests of a global proletariat, with globally-organised employers.

7

Commodification of Housework

In the last chapter we looked at the commodification of public services, those aspects of reproductive labour which, especially in the twentieth century, were socialised and transformed into paid labour to provide use values to the general population. Emerging as paid labour during this period (classified as public service work in our typology) they have since the beginning of the 1980s begun to be transformed into labour that falls into the category of capitalist service work, as they are transferred from state employment into employment in private companies. When these services have been transformed into goods, through the application of technologies, for example when the use of drugs or diagnostic equipment replaces the labour of nurses, or the use of online media the labour of university lecturers, this capitalist service work has been replaced by capitalist production work—the labour involved in commodity production.

This chapter looks at a still more radical transformation taking place in the second decade of the twenty-first century—a reshuffling of different forms of labour that requires yet another visit to the Table 2.1 in Chapter 2 to make sense of. This involves the commodification of other forms of reproductive labour: not the public service work carried out by paid public servants (which was discussed in the last chapter) but the kinds

U. Huws, *Labour in Contemporary Capitalism*, Dynamics of Virtual Work,
https://doi.org/10.1057/978-1-137-52042-5_7

of subsistence or consumption labour that are either carried out as unpaid work by household members, or as paid servants or delivered by casual workers in the informal economy as servant labour. We are thus discussing a range of activities encompassed in subsistence labour, servant labour and consumption labour in the table, and their transformation, in the current phase of capitalism into other forms of labour, especially capitalist service work.

In order to place this development in context, it is useful to think more generally about the household as a space in which reproduction, production and consumption occur simultaneously, a space which can be regarded, more than any other, as the crucible in which the transformation of one form of labour into another takes place. And here it is also informative, once again, to turn to Marx.

The household is not a topic that is discussed specifically or separately in Marx's writings. Nevertheless its implicit presence permeates his thinking and what takes place in the household is addressed indirectly in a variety of contexts, relating to different aspects of capitalism. In his theoretical work the household plays a number of crucial roles simultaneously: first, it is a site of primitive accumulation (where activities can be found that become the basis of new commodities); second (in some cases), it is a site of production of commodities for the market; third, it is a site of consumption; fourth, it is a site of social reproduction and, more specifically, the place where the reproduction of labour power takes place.

The household has its own internal social relations, with some members exercising power over the labour of others, labour which might be paid or unpaid. The social, sexual and emotional complexity of these internal household relations can be illustrated by Marx's own cash-strapped household in which the reproductive labour of his wife and daughters was supplemented by the paid labour of a servant, Helene Demuth, who was also the mother of his—formally unrecognised—son. Needless to say, such aspects are not discussed explicitly by Marx or Engels.

Whether or not one wishes to probe deeply into the contradictions of intra-household social relations, the very fact that most households include more than one person poses challenges to what is perhaps *Capital's* most celebrated cornerstone: the labour theory of value, a crucial component of which is the concept of the cost of the worker's subsistence (which has to be

subtracted from the total value produced by the worker in order to calculate the surplus value that accrues to the capitalist). While workers enter the labour market (and create value for their employers) as individuals, they consume, produce children and reproduce their own labour power in shared households. Whose subsistence, then should be included in the worker's subsistence cost? And how is this distributed if more than one member of the household engages in productive work?

Marx and Engels were not unaware of this contradiction. In *German Ideology*, it is argued that the other household members are, in effect, slaves of the male head of the household (the 'husband'), constituting his personal property.

> The division of labour … is based on the natural division of labour in the family and the separation of society into individual families opposed to one another, is given simultaneously the distribution, and indeed the unequal distribution, both quantitative and qualitative, of labour and its products, hence property: the nucleus, the first form, of which lies in the family, where wife and children are the slaves of the husband. This latent slavery in the family, though still very crude, is the first property, but even at this early stage it corresponds perfectly to the definition of modern economists who call it the power of disposing of the labour-power of others.[1]

From this premise, it was possible to conclude that, when machinery was introduced, lowering the requirement for physical muscle-power, and women and children were set to work for capitalists, they did so as slaves of this head of household. Engels, wrote in 1877:

> [there is an] immediate increase in the number of wage-labourers through the enrolling of members of the family who had not previously worked for wages. Thus, the value of the man's labour-power is spread over the labour-power of the whole family – i.e., depreciated. Now, four persons instead of one must perform not only labour, but also surplus-labour for capital that one family may live. Thus, the degree of exploitation is increased together with the material exploitation … Formerly, the sale and purchase of labour-

[1]Marx, Karl (1845) 'Division of Labour and Forms of Property—Tribal, Ancient, Feudal' in Part 1, A, *German Ideology.* Accessed on February 1, 2012 from: http://www.marxists.org/archive/marx/works/1845/german-ideology/ch01a.htm#5a3.

> power was a relation between free persons; now, minors or children are bought; the workers now sells wife and child – he becomes a slave-dealer.[2]

The valid argument is that the participation of women and children in the labour market lowers the cost of subsistence of an individual worker (which, it is implied, previously covered the cost of subsistence of the entire family) but the status of these women and children as independent workers is left ambiguous, to say the least.

Their position also, of course, opens up larger questions about how Marx and Engels viewed gender. However I do not want to explore such questions here, important though they are.[3] Rather, my aim in this chapter is to use their insights to focus on the household as the socio-economic space in which changes in capitalism can be examined in a rounded way that makes it possible to see not just how new kinds of commodity emerge but also how these commodification processes change both the character of the labour that is carried out in the home without pay and the paid work that is carried out in the labour market, and how this leads to changes both inside the household and in the composition of the working class, drawing more and workers into the conflictual labour relations that constitute the essence of capitalism, which was discussed more broadly in Chapter 2.

It is in households that just about all labour power is produced and reproduced, and most final consumption takes place. It is thus necessary to plot what takes place in the household against *all* forms of labour under capitalism, whether these are productive or unproductive, paid or unpaid, in order to understand changes in the character of labour. This means that we cannot understand the changes taking place in the household division of labour without taking into account all six of the categories of labour listed in Table 2.1 in Chapter 2.

These six categories, as may be recalled, break down into two types of 'productive' labour (capitalist service work and capitalist production work) and four types of 'reproductive' (or what Marx would have termed

---

[2]Engels, Friedrich (1877) *On Marx's Capital*, Moscow: Progress Publishers (English edition, 1956): 89.

[3]I have discussed this elsewhere, for example in Huws (2013) 'The Reproduction of Difference: Gender and the Global Division of Labour', *Work Organisation, Labour and Globalisation*, 6 (1): 1–10.

'unproductive') labour. The reproductive types further break down into two which are paid (servant labour and public service work) and two which are unpaid (subsistence labour and consumption work). Of these two types of unpaid reproductive labour, the first is involved in directly producing use values with no intervention of the market; the other is involved in activities connected with the consumption of commodities which are produced in the market. Consumption work does not produce surplus value directly, but is implicated in the externalisation of tasks formerly carried out by paid workers and can thus be regarded as contributing indirectly to the exploitation of the labour of productive workers by capitalists.

The history of capitalism can be regarded synoptically as the history of the dynamic transformation of each of these types of labour into another, with (as Marx predicted) the overall effect of driving a higher and higher proportion of human labour into the 'productive' category where it is disciplined by, and produces value for capitalists. Since most of these transformations take place within the household, or rely on the household for their reproduction, the household provides the ideal observatory for analysing these transformations. The dynamics of these changes in labour can be summarised under a series of broad historical trends, already touched on in Chapter 2. In addition to the commodification, decommodification and recommodification of services that takes them by turns into and out of the public sector, discussed in the last chapter, these include: the generation of new commodities; purchasing in the market instead of making or providing the service oneself; the substitution of goods for services; the creation of new kinds of paid service labour under the control of capitalists; and the externalisation of tasks onto consumers, leading to the expansion of unpaid consumption work.

Primitive Accumulation—The Generation of New Commodities

Most commodities have a use value (in addition to an exchange value) and therefore provide the satisfaction of human needs that existed before capitalism supplied them in the market. So it could be said that the majority of commodities are replacements for goods or services produced in the

household or its surroundings by unpaid labour in previous periods. Thus the clothing industry can trace its origins back to home-based spinning, weaving, knitting and sewing and the same can be said for the manufacture of tools, soap, pottery, furniture and a multitude of other products. Of course these industries did not appear overnight but came about as a result of complex changes in social and economic relations, such as the roles of traders and their monopolisation of certain routes and markets[4] or of rentiers, including the owners of the first factories who provided space for independent hand-loom weavers to work in rather than directly employing them.[5]

However long and tortuous the transition from an unpaid domestic or community-based activity to full market production under the control of a capitalist, the unpaid activities carried out in the household nevertheless continue to represent a reservoir of activities which can be commercialised to become the basis of new goods or service industries: from cosmetics to psychotherapy; from washing machines to powdered baby milk; from ready meals to Netflix.

When tracing these new commodities back to their origins in pre-capitalist households it is not always easy to distinguish between goods and services. All social divisions of labour, by definition, involve some people carrying out specialist tasks, the results of which are then exchanged with other people: freely, by appropriation (forcible or otherwise), through barter or by monetary payment. These tasks may involve the production of goods or the delivery of services and the more specialist they are, the easier they are to categorise. However this is a distinction that is not always easy to make when we speak of domestic production outside the market. Feeding a household, for example, involves a wide range of tasks including foraging, hunting, cultivating plants, tending and slaughtering animals, preparing, preserving and cooking ingredients and serving the results, including feeding them by hand to infants and invalids. Clothing the household may involve preparing yarns, spinning, weaving, sewing and knitting (which may be regarded as 'manufacture') as well as mending

[4]See Fernand Braudel's magisterial three-volume *Civilization and Capitalism, 15th–18th Century* (1967–1979) for a rich historical overview of this.

[5]See E. P. Thompson's *The Making of the English Working Class* (1963). See also Ellen Meiksins Wood's (1999) *The Origin of Capitalism.*

and altering, washing and ironing (which might be seen as 'services'). The inclusion of these tasks in the social division of labour also entails separating and standardising them and creating specialist occupations for supplying them.

Thus, as societies become more complex, a larger and more varied range of provision emerges to supply these goods and services. This process has taken different forms in different times and places, shaped by many social, cultural and economic factors, as well as political ones, and I do not attempt to illustrate its full complexity here. Very broadly speaking, before the advent of mass-production, when each of the items to be purchased had to be individually crafted, there was rather little difference between goods and services in terms of the relative costs of making and buying, apart from differences in skill and in access to raw materials, since the processes involved (for example in making a churn or milking a cow or making the milk into cheese) were not fundamentally different whoever was doing the work.

It is in the capitalist era that, as already described in earlier chapters, mass production became widespread: a business model in which—often using new types of machinery—the production process was broken down into standard tasks, introduced a division of labour under centralised control, to create standard products which, once the initial investment in design and machinery had been recovered, could be produced much more cheaply than ones which were individually crafted: in short, mass-produced commodities. The cheaper these commodities become, the more incentive there is for people to buy ready-made items rather than making them themselves. But to do this consumers need the cash to buy them with, increasing their dependence on earning a living in an external labour market (or, put another way, making it more difficult to live self-sufficiently providing their own subsistence through their own household labour).

While its historical development may have been uneven, coming in waves related to the recurrent crises of capitalism and the economic restructurings that followed them, the substitution of buying for doing or making in the home has been a continuing trend. This process is still ongoing, if anything accelerating in the present phase of capitalist development, with its throwaway consumer culture and its ready meals, driven on the supply side by the increasing cheapness of mass-produced commodities

and on the demand side by the scarcity of time in households where, with increased expectation that both men and women should participate in the labour market combined with an intensification of work, all adults are increasingly likely to be exhausted from overwork in their paid jobs. The process of generating new commodities from household activities should therefore not be viewed as something which only took place in the past but as part of an ongoing process which is still gathering momentum in the twenty-first century, when new commodities are being generated constantly.[6]

In terms of the typology presented in Table 2.1, this development represents a shift of labour from subsistence labour to capitalist service work and capitalist production work, with servant labour playing an intermediary role.

Social Inequalities and the Dynamics of Change in Paid Service Labour

The introduction of paid labour into households and the larger communities in which households are embedded also predates the development of capitalism and has complex origins. The power to dispose of others' labour has not, historically, rested on purely market relations but has been linked to other social hierarchies—of gender, caste, race, status etc.—and has not always involved the exchange of money. Nevertheless, the master- (or mistress-) servant relationship has persisted, and evolved, over the centuries and continues to do so.

Although, in most developed economies, there are fewer bourgeois households or family farms employing live-in staff than in earlier periods, there are large numbers of households making use, on an occasional or regular basis, of the paid services of cleaners, carers, babysitters, window cleaners, handymen, gardeners and so on. When these workers are hired directly they fall into the category of 'unproductive' or 'reproductive' labour, paid for from surplus household income (servant labour).

[6]I discuss this in greater depth in Ursula Huws (2014) *Labor in the Global Digital Economy: The Cybertariat Comes of Age*, New York: Monthly Review Press.

If the work is for a single household, a degree of social inequality is implicit in many of these relationships—the income of the master or mistress must be presumed to be considerably higher than that of the servant, in order to have enough surplus to pay them while still taking care of their own subsistence. The large-scale entry of middle-class women into the labour market in most developed economies in the latter part of the twentieth century was enabled in no small part by the much cheaper labour of other women, many of them migrants, who cleaned their homes and cared for their children or elderly dependents.[7]

However there are other kinds of service work provided to households on an occasional basis where the premise of social inequality does not necessarily hold true. This includes a range of specialist services such as cleaning windows, clipping hedges, hairdressing, installing appliances or putting up shelves, services which may well be supplied to households with lower incomes than those of the workers. Where the providers of these services operate as independent tradespeople, or do the work for cash payment in the informal economy, they are not producing surplus value and can therefore be classified as servant labour.

The size of this population of 'unproductive' service workers expands and contracts in response to other developments in the economy. Demand for it increases in response to urbanisation, with migrant households deprived of the services supplied outside the market by extended family and neighbours that were available in rural communities. It also increases in response to a high demand for women's labour outside the home—requiring some replacement for the unpaid reproductive work they would otherwise supply. Social polarisation also creates demand for services, by producing wealthy households with a desire to employ servants to support a luxury lifestyle.

Demand for this kind of labour decreases if there is a provision of public services that contribute to social reproduction (replacing it by public

[7] For evidence on this, see: Hondagneu-Soteko, P. (2001) *Doméstica: Immigrant Workers Cleaning and Caring in the Shadows of Affluence*, Berkeley: University of California Press; Parreñas, R. S. (2001) *Servants of Globalization: Women, Migration and Domestic Work*, Stanford: Stanford University Press; Ehrenreich, B. & A. R. Hochschild (2004) *Global Woman: Nannies, Maids and Sex Workers in the New Economy*, New York: Henry Holt; and Bettio, F., Simonazzi, A., & Villa, P. (2006) 'Change in Care Regimes and Female Migration: The "Care Drain" in the Mediterranean', *Journal of European Social Policy*, 16 (3): 271–285.

service work). It also decreases when capitalist firms intervene to provide such services in the market, extracting surplus value from the workers they employ to provide them (replacing it by capitalist service work labour). These processes are described below.

Expansion of 'Productive' Private Services

The growth in the number of workers working for capitalists providing private services (capitalist service work) comes in part from an inflow of former public sector workers, as described in the last chapter. However it also results from a much older trend whereby the supply of private services to households, previously provided by directly-employed servants or tradespeople, begins to be provided by for-profit companies. We can see this, for instance, in the growth of industries providing such things as laundry services or ready-cooked meals in the nineteenth century. The growth of these service industries is driven by a complex interaction between supply and demand which cannot be decoupled from other changes in the structure of social relations in the household and the divisions of labour related to this. On the demand side, as in the case of the 'unproductive' services described above, migration to cities (where housing is poor and land lacking) combined with a lack of time because of the need for all household members to seek paid work, makes it difficult or impossible for all of these services to be supplied by the labour of these household members themselves. Newly arrived migrants may also lack the social networks that allow them to find providers of such services informally and employ them directly. On the supply side, service companies are able to recruit vulnerable workers easily and work them hard, cheapening the cost of the services and thus making them affordable for larger numbers of people. This puts competitive pressure on the costs of services that are *not* provided through companies, thus accelerating the shift from 'unproductive' to 'productive' service labour. The demeaning character of the servant role may also play a role in reinforcing this trend in some cases: some workers may prefer to dispose freely of their labour power on the market, however exploitative the employer, rather than cope with the daily humiliations of working for a tyrannical master or mistress, with its associ-

ations with subservience and bondage. Those who have in the past worked independently, on the other hand, may experience the change negatively, as enforced employment deprives them of the autonomy they previously enjoyed.

The use of private servants in the home, whether employed individually or via companies, is often seen as part of a trend that is historically declining, associated with the extremes of social polarisation thought to be characteristic of developing economies. Globally, it is estimated that there are 67 million domestic workers—an estimated one worker in 25—of whom 80% are women.[8] Because so much of it takes place in the informal economy, it is rare to find accurate statistics on trends in domestic work, but some recent UK surveys suggest that, contrary to this view, it is actually growing rapidly, rather than contracting. For example one survey found that in 2011 (a period when the economy had not yet recovered from the 2008 financial crisis) approximately 6 million people in the UK were employing a cleaner compared with 5 million a decade earlier. A third said that they did so because they did not have the time to do the work themselves, a proportion that rose to nearly half among those aged 18–32.[9] Another survey, using a broader definition that included window-cleaners, gardeners and handymen, found that one UK household in three was paying for some form of domestic help in 2016, with particularly high rates among the under-35s. Even among households with incomes of less than £20,000 per year, one in four were doing so.[10] To these household maintenance services can be added other kinds of privately-procured paid service work carried out in the home, such as babysitting and care for the elderly. It is not possible to know from these data to what extent these domestic workers are directly or informally employed (which would place

[8] See ILO (2018) *Who Are Domestic Workers?*, Geneva: International Labour Organization. Accessed on November 3, 2018 from: https://www.ilo.org/global/topics/domestic-workers/who/lang--en/index.htm; Fudge, J. & Hobden, C. (2018) *Conceptualizing the Role of Intermediaries in Formalizing Domestic Work*, Conditions of Work and Employment Series No. 95, Geneva: International Labour Organization.

[9] Wallop, H. (2011) 'Million More People Employ a Cleaner Than a Decade Ago', *The Telegraph*, July 1. Accessed on April 15, 2018 from: https://www.telegraph.co.uk/news/uknews/8608855/Million-more-people-employ-a-cleaner-than-a-decade-ago.html.

[10] Poulter, S. (2016) 'Return of the Cleaner: One If Three Families Now Pays for Domestic Help' *Daily Mail*, March 31. Accessed on April 15, 2018 from: http://www.dailymail.co.uk/news/article-3516617/One-three-families-pay-cleaner-35s-drive-trend-hiring-domestic-help.html.

them in the category of servant labour in Table 2.1) or hired through commercial intermediaries (which would place them in the category of capitalist service work).

In the second decade of the twenty-first century the growth of employment in private services companies is taking place on an enormous scale. On the one hand, as described in the last chapter, the outsourcing of public services is creating a dramatically expanding global workforce of service workers, some providing physical services (for example care workers, cleaners or prison guards) and some information-based services that can be provided from a distance online (such as IT maintenance or dealing with queries from welfare claimants), workers who (even if they retain the ethical values of public servants) are now firmly part of the productive workforce, often working for giant corporations that supply the same outsourced services to both public and private sector clients.

On the other hand, privately-provided services—including many household services—are being dragged within the scope of another new breed of multinational company: the online platform. Expanding exponentially since the 2008 financial crisis,[11] online platforms now account for a significant proportion of the supply of domestic services such as cleaning (e.g. Taskrabbit, Helpling, Housekeep), household maintenance services (e.g. Trustatrader, Mybuilder, Local Heroes), cooking (e.g. Feastly, Chefxchange), food delivery (e.g. Foodora, Deliveroo, Uber Eats), taxi services (e.g. Uber, Lyft) and a range of other services including babysitting (e.g. Findababysitter, Childcare.co.uk), dog walking (e.g. PetSitter, Fetch!), providing private tuition for schoolchildren (e.g. Tutorhub, Mytutor) and so on. At present most of these platforms do not regard themselves as employers and use business models that entail taking some sort of rent (a flat fee, or a percentage cut from the employer, the worker or both). This leaves the workers without the protections that employee status would provide.

There are as yet no reliable statistics on the scale of employment covered by such online platforms, nor is it likely that there will ever be, since their business models change extremely rapidly and they overlap in many ways with other forms of casual and not-so-casual service employment. The

[11] See Huws, U. (2017) 'Where Did Online Platforms Come from? The Virtualization of Work Organization and the New Policy Challenges It Raises' in P. Meil & V. Kirov (eds.) *The Policy Implications of Virtual Work*, Basingstoke: Palgrave Macmillan: 29–48.

results of my own experimental research in this area, based on surveys in seven European countries in 2016–2017,[12] suggest that online platforms have spread very rapidly. These surveys found a high proportion of the population claiming to purchase services to be carried out in their homes from online platforms with a low of 15% in Germany, rising to 20% in Austria, 21% in Switzerland, 26% in Sweden, 29% in Italy, 30% in the Netherland and 36% in the UK. There were also large numbers of people working for online platforms, ranging from 9% in the UK and the Netherlands to 22% in Italy, although most people did so as a supplement to other forms of income, rather than a full-time job. Restricting the definition to those doing this sort of work at least weekly still found 5% of adults in the UK, Sweden and the Netherlands working for platforms, 6% doing so in Germany, 9% in Austria, 10% in Switzerland and 12% in Italy. However these included people working for platforms providing services outside the home as well as domestic services. Those saying that earnings from their work for online platforms constituted more than half their income varied from 1.6% of the population in the Netherlands to 5.1% in Italy (with Austria at 2.3%, Germany at 2.5%, Sweden and the UK at 2.7%, and Switzerland at 3.5%). Excluding those working for other kinds of platforms (including food delivery platforms), and looking only at those working in other people's homes produces an average figure of 4.6% of the population across the seven countries. A significant proportion of the work they supply is to poor households. Indeed 84.9% of those saying they provided household services at least weekly also said that they were customers for such services at least once a year.

Paying for household services is not, of course, a new phenomenon. In many cases, using a platform is directly substituting for a more direct or casual means of obtaining these services that prevailed in the past. It represents, in other words, a shift from servant labour to capitalist service worker in the labour typology or, put another way, a formalisation of the informal economy.

However this shift has consequences that go beyond the merely quantitative. Workers who provide these services are brought directly within

[12] See, Huws, U., Spencer, N. H., Syrdal, D. S., & Holts, K. (2017) *Work in the European Gig Economy: Research Results from the UK, Sweden, Germany, Austria, The Netherlands, Switzerland and Italy*, Brussels: Foundation for European Progressive Studies.

the disciplinary scope of transnational corporations: closely monitored, expected to be available at short notice, subjected to continuous review through the use of customer ratings, with tasks tightly defined, but lacking the collective voice that would come from working in a regular unionised workplace. Often responsible for buying their own tools and working materials and liable to be unpaid if the customer rating is negative, these workers incur very low costs for their employers compared with regular companies. This makes their services very cheap. This very cheapness, combined with the platforms' ability to use targeted advertising, makes it possible to extend the market for these services. People who, in the past, would have hesitated to employ a cleaner because they thought it would be too expensive, were embarrassed to be put in the position of a 'boss' or simply did not know how to start looking for one can be tempted with a special offer of '£10 worth of ironing to free up your weekend' from a known brand. And it is easy to see how, after an exhausting shift at work, the plan to cook a home meal can dissolve, first into the thought of picking up some convenience food at the supermarket on the way home and then, after contemplating the queue, and in response to a pop-up message on the smartphone on the bus, giving into the temptation to click on the app and order a pre-cooked meal to be delivered to the door by Just Eat, Deliveroo or Uber Eats.

Just as, in the past, the liberation of middle-class women from housework was bought at the expense of the labour of personally-employed servants, we now have a more widely pervasive pattern whereby the needs of the time-poor are met by the labour of the money-poor, bringing two forms of desperation into interaction.[13] The intensification of work and poor work-life balance that leads working people to depend increasingly on the market for their social reproduction directly feeds the development of a form of labour that is characterised by even poorer working conditions. The workers who rely on online platforms for most of their income

[13]The implications of this development for the gender division of labour, both in unpaid and paid work, are complex and require further investigation. In terms of service consumption, it seems likely that it may lead to a continuation of the trend towards greater equality between men and women in the household division of labour. The gender division of labour among paid platform workers, while exhibiting some diversity, appears to follow traditional gendered patterns in several respects, with women, for example, more likely to be care workers and cleaners and men more likely to be taxi drivers, delivery workers or providers of skilled home maintenance services (reference suppressed).

are among the most precarious, working long and unpredictable hours interspersed with periods of enforced worklessness (and extreme financial hardship). Their own work-life balance is likely to be as bad as or worse than that of the customers they serve, increasing their own dependence on the market and tightening still further the knots that tie them into the global digital capitalist economy.

The platforms, in other words, exert considerable control over the working conditions and earnings of workers and where legal test cases have been taken the workers have generally been deemed to be subordinate workers, rather than the 'independent contractors' the platforms would like them to be. The rent-seeking behaviour of these platforms is not unlike that adopted by the earliest factory owners at the beginning of the industrial revolution. It seems likely to be a transitional business model that will be replaced, as these platforms reach maturity, by the more conventional employment models of other service companies (such as shops, cafes, warehouses etc.) which, in the twenty-first century, also increasingly practice 'just-in-time' forms of work organisation management (such as the use of zero hours contracts) that are digitally mediated.[14]

In short, the pool of workers now working for private companies supplying reproductive services to households is growing fast, fed by several different, and increasingly convergent, sources.

Substitution of Goods for Services

This huge influx of labour into private service provision, under the control of capitalists, is not, of course the whole story of the transformation of household labour. In fact, viewed through a long historical lens it is a mere staging post in a larger trend: the substitution of goods for services. There is a limit to how much the productivity of an individual service worker can be increased, however hard that worker is forced to work. A cleaner with a mop can only cover so much square footage of floor in a given time; a nurse can tend physically to only so many patients; a courier's muscles can make it possible to cycle only so many miles.

[14]For a fuller discussion of these trends see Huws, U. (2016) 'Logged Labour: A New Paradigm of Work Organisation?', *Work Organisation, Labour and Globalisation*, 10 (1): 7–26.

Once a business model has been established, and competitors have entered the field following the same model, perhaps with lower start-up costs and cheaper labour, the law of dwindling returns on investment sets in. Capitalism's relentless need for expansion requires something more radical than just more of the same, especially during periods of restructuring after its recurrent crises. This is where science and technology come in. One of the most striking features of the history of capitalism—indeed, some would argue, its main characteristic—has been the pattern whereby waves of innovation have generated new physical commodities to satisfy needs that were previously met through the labour of service workers, whether paid or unpaid, productive or 'unproductive'. In the early days of capitalism, as described above, inventions such as the power loom, the printing press and the steam train displaced earlier forms of manual labour (some if not most of which had previously been carried out in the household) and increased the productivity of the remaining workers by orders of magnitude. They made possible the production on a very large scale of standardised commodities that had previously had to be laboriously made by hand. But these new means of production had themselves to be manufactured too. Thus there had to be factories to make looms as well as factories to make cloth; factories to make vats as well as factories to make soap, together bringing into being the proletariat Marx wrote about so eloquently. The impacts of automated means of production on earlier forms of labour are not always easy to plot. For example the sewing machine was used by unpaid workers in the home who had previously made and mended their families' clothes by hand (category 1 type labour) and by paid seamstresses employed privately (category 2) as well as by workers employed to work in clothing factories, or as outworkers supplying their owners (category 5). Nevertheless, broad patterns can be discerned whereby, for example, the use of washing machines displaced laundry workers, the use of automobiles displaced stable hands and the radio and recorded music displaced itinerant musicians. The typical historical shift is from 'unproductive' (or 'reproductive') unpaid work to 'unproductive' (or 'reproductive') paid service work to 'productive' paid service work to 'productive' manufacturing work.

The twentieth and twenty-first centuries provide innumerable illustrations of this trend. Each crisis of capitalism has triggered a wave of

restructuring, and each of these waves has launched the development of new industries manufacturing commodities many of which arise from or substitute for what were previously service industries, often introducing forms of 'labour saving' commodity that affect both paid and unpaid reproductive labour, from vacuum cleaners to Amazon's Alexa. As the total amount of manufacturing grows around the world, so too does the number of workers involved in the directly exploitative form of labour that goes into producing these commodities—not just in factories but all along the value chain from design to distribution.

Externalisation of Labour and the Growth of Unpaid Consumption Work

The promise of labour-saving commodities is that they will reduce the amount of unpaid reproductive labour that household members must perform, and one of the main incentives to purchase them is the time that will be saved—time that is, of course, at a premium precisely because of the intensification of capitalist pressure on workers to produce more in their 'productive' employment. However the consumption of these commodities creates new kinds of unpaid labour as companies externalise to customers as many tasks as possible in order to increase the productivity of paid service workers or lower the cost of production: from keying in orders to collecting packages; from checking out groceries to assembling flat-pack furniture.

The announcement in 2017 by Ikea (which built its global business on the basis of customers assembling their own furniture) that it had purchased the online platform Taskrabbit (one of whose most popular offerings is a supply of paid labour to assemble flat-pack furniture) gave graphic evidence that consumption work is real labour, requiring the expenditure of labour time that could be used for other purposes. Taskrabbit (along with other platforms, such as Lineangel and Placer) also offers busy or lazy consumers the opportunity to pay a 'tasker' to wait in a queue on their behalf, or stay in their house to await a delivery. Ikea is thus able to exploit two different types of paid labour in selling these items. For the majority of the population such services are a luxury, and they must expend this

labour themselves, adding to the burden of unpaid labour while also contributing to increasing the intensification of exploitation of paid labour. This development increases the amount of unpaid consumption work.

It can be concluded from this brief analysis that the characteristics of capitalism described by Marx in *Capital* are still with us. It continues to expand exponentially, penetrating all areas of life and dragging more and more aspects of it into the market where living labour can be used for the production of surplus value. The numbers of workers drawn into this relationship continue to grow.

The workplace (or, to be more precise, the labour relationship between worker and capitalist) remains the site of antagonism where the struggle is waged over what proportion of the worker's time is exchanged for how much money (or, put another way, how much surplus value can be extracted from the worker's labour). However many of the parameters of this exchange are set in the household, which can also be seen as the cauldron in which changes in the scope and structure of capitalism are brewed, as well as the site in which its contradictions are played out.

The household represents, simultaneously, a reservoir both of supply and of demand: for labour power and for new commodities. It is where that basic raw material of capital—human labour time—is produced and fought over in a multidimensional struggle. Some labour time is supplied, more or less willingly, or at least by agreement, by workers to their employers during their formal working hours. Other time is snatched more covertly from the household by capitalists: the time that was spent in the past on their education and upbringing and in the present on their bodily maintenance. Yet more time is stolen by the creeping extension of the working day: for example the time spent preparing for and travelling to work or laundering one's working clothes; or the time spent working outside formal working hours to deal with communication from the employer or client. To this must be added the time that is contributed to other capitalists by consumption work: time, for example, spent in a telephone queue waiting to talk to a call centre worker in order to maximise that worker's productivity; or going to the supermarket. The more time-poor the household, the greater the conflicts between household members over the domestic division of labour and the greater the pressure to purchase more commodities in the hope that they will save time. Which of course

leads to increased pressure to earn more money in order to pay for these commodities. Which then leads to an even greater squeeze on household time. Thus does the knot of capitalism tighten. And thus does capitalism grow.

8

What Next?

What I have tried to show in this book is the dialectical way that capitalism develops. Workers, with all their intelligence and ingenuity and dexterity and empathy and muscle-power, are absolutely essential to its existence and its continuing growth. Yet they are also its victims, locked into a relationship that sucks them of their vitality and energy, seeming always to demand more from them than it can actually deliver in return, despite its ever-enticing promises. But precisely because of that inventiveness and curiosity and ability to understand and analyse what is going on workers do not usually take this lying down. Wherever and whenever they can, they find means to resist. In the past this has led to the development of forms of organisation that have won real gains for some sections of labour. But these gains have in turn been undermined by capital or twisted to its own advantage because the capitalist system (also driven, as it is, by the knowledge and understanding provided by its workers) is in a constant process of adaptation and innovation. Over time, unorganised workers become organised workers, but then these organised workers too become vulnerable to becoming redundant as new cohorts of unorganised workers are introduced to substitute for them. When these new unorganised work-

U. Huws, *Labour in Contemporary Capitalism*, Dynamics of Virtual Work,
https://doi.org/10.1057/978-1-137-52042-5_8

ers then start to resist and organise they then become the next generation of organised workers.

So is it just a question of a wheel that keeps on turning? A continuing cycle that goes round and round indefinitely? No, because capitalism's need for expansion is insatiable and unstoppable (at least unstoppable while it remains capitalism) and each convulsion brings with it an exponentially greater impact—not just in dragging more and more workers inside itself and sucking more and more aspects of life within its alienating scope, but also in environmental degradation, with some parts of the earth's surface ruthlessly exploited for the extraction of raw materials and chemical farming, while other parts are contaminated with toxic detritus. While the value that can be realised from ever-proliferating commodity production accrues to capital (apart from the fraction that workers manage to grab back in the form of wages) many of the costs are borne by the living creatures and plants that inhabit the planet. With each turn of the wheel, these costs go up by orders of magnitude.

Where is this leading us? There will always be some people who argue that, left to itself, capitalism will simply destroy itself: that the great shuddering engine will simply shake itself to pieces, torn apart by the force of its own contradictions. Eventually, in this view, capitalism will become so huge and all-embracing that there will be no space left outside it for it to carry on expanding into. And the imperative to enlarge continuously is so fundamental to the very nature of capitalism that this will trigger the final cataclysmic crisis. Others, over the years, have pointed out that this never actually happens. Part of the genius of capitalism is its ability to find new things to commodify. Even the side-effects of its own destructiveness can become the basis for new tradeable goods, as the market in carbon credits illustrates. We now take commodities for granted that would have astonished our ancestors, ranging from satellite navigation systems to Prozac, with notifications of newly invented commodities flooding our inboxes every time we open them. So long as new and growing populations are being brought more fully within the scope of capitalism there will be an expanding market for these commodities. If capitalism is to be stopped, it looks as if we may have to look for other mechanisms to bring this about.

Which brings us back to labour, living labour. It is this labour that keeps the whole show on the road. But labour is very vulnerable, embodied as it

is in human beings who need to sleep and eat and stay warm and sheltered and take care of their dependents; human beings who can only be physically present in one place at a time, who feel pain and who have varying capacities for sustaining themselves. Some may live in communities that offer mutual support and provide resources that enable survival. Others may have little choice but to accept whatever is offered to them in return for enough money to pay for the next meal or the next night's lodging.

Nevertheless, it is these variable human beings, with all their diversity and inconsistency, who hold the future in their hands. Whether and how they understand their power, and whether and how they choose to use it are not questions that can be answered in advance. One possibility is that, as the numbers of people working directly for capital in the conflictual relationship that Marx called 'productive' grow, they will develop a common identity as a working class, and, acting collectively on behalf of that class, will start to make demands at least for a betterment of their working conditions and at most for a completely different kind of society. But the formation of such a class is by no means a simple thing. For a common class to be said to exist, two different features need to be brought into alignment. The first of these is the workers' objective class position; the second is their subjective class consciousness.[1] In other words, workers must not only be placed into that antagonistic relationship to capital I have described but also to be aware of it, and to recognise their common interests with others who are similarly placed.

As I hope the earlier chapters of this book have shown, developments in contemporary capitalism are bringing increasing numbers of workers into the direct relationship with capitalist employers that places them objectively in the working class as producers of surplus value (as capitalist service workers or capitalist production workers in the typology in Table 2.1 in Chapter 2). There are several routes into this relationship. Some of these new proletarians may be drawn from pre-capitalist forms of work (for example in subsistence agriculture) to working for existing industries that are expanding (for example in extraction, capitalist agriculture or manufacturing). Others may be employed in some of the new industries that are developing to create new kinds of commodities based

[1] See Lukacs, G. (1967 [1920]) *History & Class Consciousness*, London: Merlin Press.

on the natural world (for example in pharmaceuticals, bio-engineering or cosmetics) or those manufacturing the new means of production (such as robots or 3D printers). Yet others may be the replacements for domestic servants or casual labourers now recruited into private service companies and subjected to their discipline. And still more may be former public sector workers transformed into employees of capitalists because of outsourcing or privatisation.

Each of these workers is now in an individual relationship with a capitalist employer. These relationships, of course, differ enormously in many respects: whether there is direct contact with that employer or whether there is an intermediary; whether there are other workers in the same situation with whom solidarity can develop; whether there is a structure for negotiation via a trade union; whether the worker feels grateful or disgruntled; the extent to which the contract is permanent and secure; whether the worker has rights of citizenship in the location where the work takes place—to name but a few. And all these variables will affect not only these workers' identification with and attitude to the employer, their understanding of their relationship to value production and their propensity to resist, but also their subjective sense of their own class positions. Plotting the relationship between any individual job and the larger value chain in which it is embedded is, however, becoming ever more challenging as activities become more fragmented, tasks become more standardised and value chains become longer and more elaborate, distributed around the globe in rapidly changing configurations, often connected only by means of digital interfaces, in which the very identity of the organisation that lurks behind that interface may be invisible to the user.

To make matters even more complicated, the same task may be supplied by different types of labour, some of which may be directly productive for capitalists while others are only indirectly so. For example there is a multitude of tasks involved in validating and processing the data that fuels the algorithms of the global corporations that are developing new commodities such as self-driving cars, or face-recognition software, a type of labour sometimes known as 'artificial artificial intelligence'.[2] Self-driving cars, for example, need to be able to tell the difference between a pedestrian and a

[2]This phrase is used by Amazon Mechanical Turk to advertise its services.

bollard or a between a moving vehicle and a static road-sign in order to navigate their way along a street. To develop reliable systems that can do this, a vast amount of visual data has to be processed and labelled—initially by human beings. Typically this might involve looking at a series of images captured by a camera and labelling each one that contains, say, a bus, or a street sign. Some of this labour is paid, albeit in tiny amounts, in the form of 'tasks' commissioned via an online platform such as Clickworker, Crowdflower or Amazon Mechanical Turk from people who are paid a fraction of a cent per click. But some of it is sourced by companies like reCAPTCHA which provide authentication services to companies, such as Skype, requiring people who sign up for their services to 'prove that they are not a robot' by clicking on images in exactly the same way as a paid clickworker. This company built up its business initially by selling its services to other companies wanting to digitalise print-based archives. When documents are scanned, there are often some letters or numbers, such as those at the top and bottom of pages, that are difficult for machines to identify using optical character recognition (OCR). Recaptcha solved this problem by creating simple tasks that required users to verify hard-to-read digits. Luis Von Ahn, the inventor of this system, which he calls 'human computation' explains the business model thus:

> In the case of reCAPTCHA, the value proposition is as follows: by typing a CAPTCHA, the user gets access to a desired resource like a free email account or tickets to a concert, and in exchange they perform ten seconds of work that is utilized to help transcribe a book. In the case of Mechanical Turk, users are paid a few cents to perform each task.[3]

He boasts on his blog that 'To date, over 750 million unique people—more than 10% of humanity—have helped transcribe at least one word through reCAPTCHA'.[4] Since then Von Ahn has gone on to develop other services, such as Duolingo, which provides free online language tuition to an estimated 2000 million users in return for getting them not only to translate large chunks of text without payment but also to feed

[3]Von Ahn, L. (2010) *Work and the Internet*. Accessed on November 25, 2018 from: http://vonahn.blogspot.com/.

[4]Ibid.

in useful suggestions to fine-tune the still-rather-clunky automatic online translation tools that are already in use across the Internet.[5]

This is just one example that illustrates the problem of identifying who is benefitting from a particular type of labour. Workers who want to find out to whom they are selling their labour find further obstacles placed in their way, not only by the presence of a range of different intermediaries along the value chain but also by the fact that they may be supplying their services to many different clients, some of whom are capitalist enterprises, while some are not. For example it is increasingly common for academics to use platforms such as Amazon Mechanical Turk for tasks such as taking part in surveys, or processing data for use in research that is not carried out for profit.

Such an extreme fragmentation and scattering of tasks might make it seem as though the effort of trying to sort them into categories is futile. However this diffusion represents, so to speak, a sort of fuzziness at the extreme outer edges of the labour market. Not only do the patterns become easier to read as one turns one's gaze closer to the core, but it is also the case that workers themselves seek to consolidate their work as much as possible in order to maximise their income, and, when they can, to make common cause with others doing similar work, so the pattern of dispersal is complemented by a contrary pattern of recoalescence, like raindrops pooling on a windowpane. While there will undoubtedly continue to be ambiguities and misunderstandings about the precise relationship of particular work tasks to capital at the outer fringes of organisations, especially when there is an interaction between paid workers and consumers or when rapid change in processes is underway, the task of plotting these relationships is by no means impossible, albeit, perhaps, requiring some effort in the form of research into companies' business practices and inter-relationships.

Even without such knowledge, workers may nevertheless begin to experience themselves *as* workers, and, more specifically, as workers who are exploited by a particular company. There is often a moment—sometimes a sudden shock—of realisation that what seemed to be a friendly relationship with an employer in which one freely hands over one's labour in

[5] Feedough (2018) *Duolingo Business Model: How Does Duolingo Make Money?* Accessed on November 25, 2018 from: https://www.feedough.com/duolingo-business-model-how-does-duolingo-make-money/.

return for a reward, in a context of mutual trust and recognition, is in fact not so benign after all.

I have a vivid recollection of such a moment in my own working life. I was a few weeks into my first 'proper' job after graduating from university, thrilled to be working in a creative role—for an innovative educational publisher, producing audio-visual teaching materials for schools, to accompany a series of books. I hadn't thought much about the pay that was on offer, pleased to have a job at all, especially a job that involved such interesting work. The project was ambitious, designed to give teachers a range of different stimulating materials to support child-centred, project-based learning. The books were almost ready but nobody on the staff had the expertise to produce the non-book materials that had been planned and the freelancers they had employed to do this had not delivered anything that worked in the classroom. So I was tasked with producing these in a very small space of time. Over the course of the first two months I had to learn, very quickly, how to persuade other people (or carry out myself), and with a very small budget, to organise live performances in a studio, record and edit audio tapes, press records, mass-produce cassette tapes, purchase packaging, print labels and record sleeves, produce filmstrips, direct short films, clear copyright on previously recorded, filmed or photographed material, research archive sound recordings, work with teachers who trialled material in their classrooms and liaise with a range of different internal editorial, design and production departments.

It was exciting and scary, with a sense of making it up as one went along, and with a real possibility of failure haunting every step which kept the adrenalin flowing. I tapped into every possible source of help, including twisting the arms of friends who worked in the media industries to provide me with instant tuition. On one occasion when a recalcitrant studio technician refused to do what I wanted and used technical language to justify his decision, I was reduced to going out to a phone box to call a sound recordist friend ('Help! what's a potentiometer?') and ended up inventing an imaginary male boss of whom I was terrified whose orders might stand more chance of being obeyed than those of a young woman.

I was working seven days a week, often till late at night, focussing only on getting results and pleasing my newly-found colleagues. Then, after two months, I discovered that my cheques were bouncing. The salary

I was getting was so low that it wasn't covering my basic outgoings. I was actually worse off than I had been as a student because my outgoings were so much higher. I mentioned this to a colleague at work. 'Oh', she said. 'You should be claiming overtime'. I hadn't realised that overtime pay existed. So I wrote to the personnel department to ask how to make a claim for it—only to be told that this could not be done retrospectively. I should have asked in advance, and, furthermore, even were I to do so it was unlikely that this would be granted. There was no sign of appreciation for how hard I had been working; no sympathy. If I didn't like it, the clear suggestion was, then I could always leave. It felt like having a bucket of cold water thrown over me. I was not just hurt that all the hard work I had done had been taken, without thanks. I also felt humiliated to have my request for reward rejected so nonchalantly, and embarrassed to have been so foolish and naïve as to allow myself to be taken advantage of so easily. When I was approached shortly afterwards by a colleague who was sounding out interest in joining a union I had no hesitation in signing up.

Since then, I have heard numerous other people describe similar moments in their lives. In some cases, like me, they had a sudden moment of realisation, like hearing the 'ker-ching' of a cash register clocking up the value of their work to the employer, while realising with a sudden shock that what they had produced no longer belonged to them. Often this coincided with being laid off, made redundant or downgraded, or seeing somebody else promoted in their place; or the introduction of a new system of work, in which everybody was suddenly expected to work longer, or harder, than before. In other cases it was more of slow dawning, a gradual loss of the sense of being valued, a feeling of being taken for granted: that 'nobody gave a damn about me'. Sometimes this consciousness rose to the surface during trade union negotiations or a strike action. There is no reason not to assume that an employer is benign under circumstances in which that employer is not being asked to provide anything that is not stipulated in the original contract. It is only when one asks for something that seems reasonable and is told 'no' that it becomes apparent that there are conflicting interests at stake. You don't realise that a door is locked if you never try to open it. It can be very surprising to see how quickly people who previously seemed conservative and conformist can become radicalised in a situation where they come directly into contact

with behaviour that they feel to be unfair or aggressive, a radical anger that is often apparent in interviews with strikers or demonstrators in journalistic accounts.

It may well be that only a minority of workers ever experience such 'ker-ching' moments. Some may have already learned, from family and friends and the culture in which they grew up, that employers are not to be trusted. They may approach any employment relationship with a suspicious attitude that agrees to offer only what is stipulated, expecting additional reward for additional effort and putting solidarity with fellow workers ahead of individual personal gain. It is workers like these that E. P. Thompson (discussed in Chapter 4) described in his *Making of the English Working Class:* class-conscious members of an existing working class that recognises itself as such. Indeed, in the mid-twentieth century, many of the workers who entered public sector employment (which, strictly speaking, was *not* work that was productive for capitalism) came from cultural backgrounds that had instilled such attitudes and brought them with them to the workplace, regardless of whether this was public or private. They could thus be said to have had a working-class consciousness even if they were not, in a Marxian sense, actual members of the working class.

Such workers are, of course, the ones that capitalists want to avoid employing wherever possible. They much prefer green, eager-to-please recruits who believe that the employer has their best interests at heart, and that the harder they work, the better they will be rewarded. Many of these new workers may never experience a 'ker-ching' moment. They may feel that they are well off in their work, doing better than their parents, or their counterparts in the local labour market who do other kinds of work. And, objectively speaking, this may well be the case. There is, for example, ample evidence from the research on online platforms that workers based in low-wage countries earn more from these global platforms than they would if they were doing the same work for employers in the local labour market.[6] Competition in a global labour market may put downward pressure on

[6]For evidence from India, see D'Cruz, P. & E. Noronha (2016) 'Positives Outweighing Negatives: The Experiences of Indian Crowdsourced Workers', *Work Organisation, Labour and Globalisation*, 10 (1): 44–63; for evidence from Bulgaria, see Yordanova, G. (2015) *Global Digital Workplace as an Opportunity for Bulgarian Women to Achieve Work-Family Balance*, Dynamics of Virtual Work Working Paper 5, Hatfield: University of Hertfordshire.

pay rates for, say, a graphic designer in New York, or London or Berlin, but could open up marvellous new opportunities for another designer in Kiev, or Hanoi or Dhaka. In other cases, skilled industrial workers may find themselves earning more working for global companies than they would if they worked locally in the informal economy, for example as agricultural or service workers. From the perspective of the global employer, their wages may be negligible compared with those of their counterparts in a high-wage Western economy and it is worth offering a bit more than the local going rate in order to buy loyalty and commitment.

Even if these workers start to experience problems with their working conditions, feel they are treated unjustly or enter into disputes with their employers, they may not necessarily attribute this to their position as workers whose labour time is being appropriated to produce value for capitalists. Neither will they necessarily identify their interests as aligned to those of other workers who are employed by the same capitalists. On the contrary, there are many factors that stand in the way of any such identification, especially when their fellow workers may be based in another country, with different ethnic origins, cultural traditions, aspirations and class backgrounds. The workers recruited by foreign companies in developing countries are likely to be better-educated than many of their counterparts back in the company's home country, with an ability to speak the global language of the employer. They are more likely to be from relatively privileged backgrounds, perhaps having grown up in a household where servants are employed, and to identify themselves with the local middle class, rather than the less-educated, monoglot, servantless workers the company has traditionally employed elsewhere. Such impressions are likely to be reinforced if they encounter racism in their encounters with other workers or customers from more developed economies. In a study of call-centre workers in India, for example, Sujata Gothaskhar,[7] found that most were from upper castes, and were university graduates, drawn from the small fraction of the Indian population that spoke good English. In another Indian study, Premilla D'Cruz and Ernesto Noronha[8]

[7] Gothoskar, S. (2007) 'Workers' Knowledge in the 'Knowledge Society': Voices from the South', *Work Organisation, Labour and Globalisation*, 1 (2): 168–177.

[8] D'Cruz, P. & E. Noronha (2009) 'Experiencing Depersonalised Bullying: A Study of Indian Call-Centre Agents', *Work Organisation, Labour & Globalisation*, 3 (1): 27–46.

interviewed call centre workers who were actively discouraged from seeing themselves as workers but were encouraged to identify as professionals, with frequent appeals to their patriotism. If they demanded improvements in their working conditions, the local managers argued, then that would make India a more expensive location and the company would site their call centre somewhere else. Demanding their rights as workers was therefore more or less tantamount to undermining the national economy, and many accepted this logic, seeing themselves as middle class and finding other outlets for their frustration when the working conditions became too intolerable.

This is not the place for a detailed discussion of the extensive literature on class consciousness, the notion of 'false consciousness' and the many ways in which workers absorb, and identify with, the hegemonic 'common sense' of the societies in which they live.[9] There have also been many studies of the way in which the resulting internalisation of management values and organisational imperatives leads to what Michael Burawoy[10] calls the 'manufacture of consent' and organisational cultures in which workers, obliged to meet management-defined targets or performance indicators, end up colluding in their own exploitation, for example under the system sometimes referred to as 'Toyotism', after the Japanese car manufacturer that pioneered ways of making workers responsible for their own productivity.[11] To do this literature justice would require another book.

There are clearly many factors that mitigate against workers' recognition of their relationship to capital and, following from this, an understanding of the power that they could potentially exert by withdrawing their consent to it. Some of these factors are embedded in the specific ways that their work is organised and managed; others stem from broader social, political and cultural forces.

---

[9] Questions addressed, *inter alia*, not only by Karl Marx and Georg Lukacs, as already noted, but also by Antonio Gramsci, the Frankfurt School and their many followers, too numerous to mention.

[10] Burawoy, M. (1982) *Manufacturing Consent: Changes in the Labor Process under Monopoly Capitalism*, Chicago: University of Chicago Press.

[11] Dohsem, K., U. Jürgens, & T. Malsch (1985) 'From "Fordism" to "Toyotism"? The Social Organization of the Labor Process in the Japanese Automobile Industry', *Politics & Society*, 14 (2).

What I would like to focus on here is a couple of particular aspects of this broader social environment, aspects that have risen to visibility in the second decade of the twenty-first century. The first of these is the increasing pressure, especially on the young and the unemployed, to work without pay.[12] In the USA, for example, more than 62% of students who graduated in 2017 reported doing an internship at some point during their college years, compared to about 50% in 2008 and 17% in 1992.[13] In the UK it was estimated that about 70,000 unpaid internships were offered in the same year.[14] A 2017 survey by the recruitment agency, Onrec[15] found that 48% of UK 16-25-year-olds had undertaken an unpaid internship, while only 17% had been paid for their work experience. In 2011, the UK Government introduced compulsory work placement schemes for unemployed youth aged 18–24, who would continue to be paid their unemployment benefit but would not be paid for their work. Over 300,000 such placements were set up between January 2011 and November 2014.[16] Similar patterns are visible elsewhere.[17] By severing the link between the amount of labour time invested and any reward accruing from it, this makes it difficult for workers to recognise the value of their own labour time. Multiplied across the whole labour market as new generations enter the workforce, this seems likely to have a large negative impact on workers' sense of their own entitlement to decent wages and conditions.

Another important development has been the astonishingly rapid spread of social media across the world, with a growth in users from 0.97 billion in 2010 to 2.62 billion in 2018 and an estimated 3.02 billion

[12] Perlin, R. (2011) *Intern Nation: How to Earn Nothing and Learn Little in the Brave New Economy*, London: Verso.

[13] Waxman, O. B. (2018) 'How Internships Replaced the Entry-Level Job', *Time*, July 25. Accessed on December 15, 2018 from: http://time.com/5342599/history-of-interns-internships/.

[14] Butler, S. (2018) 'Initiative to Crack Down on Unpaid Internships Launched in UK', *The Guardian*, February 8. Accessed on December 15, 2018 from: https://www.theguardian.com/society/2018/feb/08/initiative-to-crack-down-on-unpaid-internships-launched-in-uk.

[15] Onrec (2017) '48% of Young People Have Undertaken Unpaid Internships in the UK', July 24. Accessed on December 15, 2018 from: http://www.onrec.com/news/statistics-and-trends/48-of-young-people-have-undertaken-unpaid-internships-in-the-uk.

[16] Dhar, A. (2015) *Work Experience Schemes*, Briefing Paper 06249, London: House of Commons Library, June 25.

[17] See for example, de Peuter, G., N. Cohen, & E. Brophy (2012) 'Interns Unite! (You Have Nothing to Lose—Literally)', *Briarpatch*. Accessed on December 15, 2018 from: https://briarpatchmagazine.com/articles/view/interns-unite-you-have-nothing-to-lose-literally.

by 2021[18] and a rise in the average time spent on social networks from 90 minutes per day in 2012 to 135 minutes in 2017.[19] A characteristic feature of these networks is that they provide their users with metrics, enabling them, for example, to count the number of 'friends' or 'followers' they have and to see how often any particular post is 'liked', 'swiped', 'favourited', 'retweeted' or 'shared'. Positive or negative reactions may also be gauged by counting the types and numbers of emojis a post has attracted. There is compelling evidence that intensive social media use is linked to loneliness, depression and low self-esteem.[20] However little research appears to have been done on the ways in which using such metrics to evaluate one's self-worth may feed into labour market behaviour. It seems likely, though, that internalising such valuations and reading the negative assessments of others as an objective judgement on one's own value as a person provides a perfect preparation for acquiescence to working conditions in which a worker's worth is assessed by means of customer ratings. As the worker focuses more and more on gaining good ratings (which are not just sought for their intrinsic value but also because they have a direct bearing on how much can be earned), the amount of labour time he or she has invested in the labour starts to feel irrelevant. If that investment of labour did not lead to a good result, then, many might conclude, that must be because the work, and hence the worker, is inadequate. These feelings of inadequacy are then internalised, and the worker takes responsibility for his or her perceived failings. And the sense of entitlement to reward for the time invested starts to evaporate.

If the work is non-standard, another dimension of internalised responsibility may be added. Its logic goes something like this: 'I cannot work

[18] Statista (2018) *Number of Social Network Users Worldwide from 2010 to 2021 (in billions)*, July. Accessed on December 15, 2018 from: https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/.

[19] Statista (2017) *Daily Time Spent on Social Networking by Internet Users Worldwide from 2012 to 2017 (in minutes)*, September. Accessed on December 15, 2018 from: https://www.statista.com/statistics/433871/daily-social-media-usage-worldwide/.

[20] See for example, Hunt, M. G., R. Marx, C. Lipson, & J. Young (2018) 'No More FOMO: Limiting Social Media Decreases Loneliness and Depression', *Journal of Social & Clinical Psychology*, 37 (10): 751–768; Valkenburg, P. M., J. Peter, & A. P. Schouten (2006) 'Friend Networking Sites and Their Relationship to Adolescents' Well-Being and Social Self-Esteem', *CyberPsychology & Behaviour*, 1 (5): 584–590.

Read More: https://guilfordjournals.com/doi/10.1521/jscp.2018.37.10.751.

full-time right now because I have childcare responsibilities/ I have a health condition that means there are days when I am too tired to work/ I need to keep an eye on my elderly parent/ I am a student/ I have this other part-time job I don't want to give up/ I am a struggling artist and need to be available to do creative work if and when I get a commission. I therefore welcomed the chance to do this work that was described as "flexible". It was my free choice to take this work and I am lucky to have it, so I really don't think I have any right to start making demands of the employer, even if the work is turning out to be much more difficult, unpredictable and time-consuming than I expected'. Over the years I, and other researchers I have worked with, have heard countless versions of this argument from a range of different types of worker. Like other manifestations of low self-esteem, for example when people feel that the pain they experience in abusive relationships is their own fault, it can be extraordinarily difficult to challenge.

Such feelings of disentitlement, self-blame and personal responsibility may be reinforced by other features of contemporary labour markets, such as individualisation and isolation. The physical separation of workers from each other (seen in an extreme form in the case of remote work mediated by online platforms) makes it difficult or impossible for workers to compare notes or discuss strategies for mutual support and tips the balance away from collaboration and towards increasing competition among fellow workers.

The conditions in contemporary labour markets are a fertile breeding ground for such attitudes. Since the financial crisis of 2008 a number of trends that were already present have accelerated and reached critical mass. In 2015, the International Labour Organization reported 'a global shift away from the standard employment model, in which workers earn wages and salaries in a dependent employment relationship vis-à-vis their employers, have stable jobs and work full time. In advanced economies, the standard employment model is less and less dominant'. Even within standard employment, the proportion who were on part-time or temporary contracts now accounted for nearly six out of ten workers.[21] Although official statistics suggest that the majority of employment in

[21] International Labour Organization (2015) *World Employment Social Outlook: The Changing Nature of Jobs*, Geneva: ILO: 1.

Europe remains 'standard', non-standard employment is growing rapidly (from 23% among 25-39-year-olds in 1995 to 32% in 2016) and could become a majority of all employment by 2030 if present trends continue.[22]

Some statistics from the UK illustrate the sharp rise in the numbers of workers on non-standard contracts, or, indeed, effectively no contracts at all, including precarious forms of employment contract, such as zero-hours contracts (estimated conservatively by the Office of National Statistics [ONS] at 2.8% of the workforce in December, 2016) and temporary agency work (estimated by the Resolution Foundation at 2.5% of the workforce[23]). The ONS further estimates that the level of self-employment rose from 3.3 million (12% of the labour force) in 2001 to 4.8 million (15.1% of the labour force) in 2017. They also note that the income of the self-employed is significantly lower than that of employees, 'by the financial year ending 2016, full-time male and female employees earned £533 and £428 respectively, compared with £363 and £243 for full-time male and female self-employed workers. In level terms, full-time male and female employees earned 46.8% and 76.1% more respectively compared with full-time male and female self-employed'.[24] Many of these self-employed people are defined as 'independent contractors' but lack the autonomy and choice that would render them genuine freelancers. Others are employed using tortuous devices such as 'umbrella contracts' to evade restrictions imposed by employment law or tax regulations. Some are the twenty-first century equivalent of day labourers, plucked from a roadside queue to put in a few hours work on a building site, or waiting for a mobile phone alert from an online platform to summon them to perform a one-hour 'task'.

My research, carried out with colleagues at the University of Hertfordshire, has found large numbers of people working for online platforms in

[22] European Commission (2017) *Working Document Accompanying Second Phase Consultation Document of Social Partners under Article 154 TFEU*, Brussels: European Commission Directorate General for Social Affairs, November 11, 2017: 14.

[23] Kollewe, J. (2016) 'Britain's Agency Workers Underpaid and Exploited, Thinktank Says', *The Guardian*, December 5. Accessed on December 16, 2018 from: https://www.theguardian.com/business/2016/dec/05/britains-agency-workers-underpaid-and-exploited-thinktank-says.

[24] ONS (2018) *Trends in Self-Employment in the UK*, London: Office of National Statistics. Accessed on December 16, 2018 from: https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/trendsinselfemploymentintheuk/2018-02-07.

Europe, ranging from 9% of the working-age population in the UK and the Netherlands to 22% in Italy, but the majority of these do so as an occasional top-up to other forms of income. Narrowing the definition down to people who gain at least half their income from such platforms, work for platforms at least weekly, and use an 'app' to be notified of new tasks or log their working hours, produces estimates ranging from 1.2% of the working population (in the Netherlands) to 3.3% in Italy. In actual numbers, this represents approximately 720,000 workers in the UK, 80,000 in Sweden, 140,000 in the Netherlands, 1,420,000 in Italy, 1,070,000 in Germany and 110,000 each in Switzerland and Austria.[25]

There is of course a real sense in which the existence of this pool of casual labour poses a direct threat to organised labour. Temporary agency staff are brought in to substitute for permanent employees; outsourcing substitutes casual workers for regular employees; Uber drivers replace better-organised taxi drivers; and entry level posts in knowledge-based industries are filled by unpaid interns. But the old dichotomies are splintering, perhaps because neoliberalism has done its job so well.

The evidence from my own recent research suggests that no sharp line can be drawn between 'gig economy' workers and others. Rather, work for online platforms seems to represent part of a broad spectrum of casual, on-call work spreading across diverse industries and occupations: a kind of work that is increasingly broken down into discrete tasks, managed via online platforms and carried out by the working poor. While the numbers of 'non-standard' workers grow, the practices of the 'gig economy' are spreading across the labour market, including workers with 'normal' employment contracts, creeping insidiously into regular workplaces. Platform workers may represent an extreme example of just-in-time 'logged' labour,[26] expected to be available at any time to perform a specific task, but their situation is by no means exceptional. Between a third and a half of workers who are *not* platform workers now check their emails from their homes, suggesting a widespread blurring of the spatial and tem-

[25] Huws, U., N. H. Spencer, D. S. Syrdal, & K. Holts, *Work in the European Gig Economy: Research Results from the UK, Sweden, Germany, Austria, the Netherlands, Switzerland and Italy*, Brussels, Foundation for European Progressive Studies: 8.

[26] Huws, U. (2016) 'Logged Labour: A New Paradigm of Work Organisation?', *Work Organisation, Labour and Globalisation*, 10 (1): 7–26.

poral boundaries of the working day. A smaller minority (ranging from one in ten to one in twenty of those who are *not* platform workers) are also expected to respond to apps telling them when to report for work, while between 8 and 24% use an app to log the work they have done. This suggests not only that these supposedly 'regular' employees may be expected to work beyond normal hours but also that they are increasingly managed by performance, rather than on the basis of working standard hours. Although, as would be expected, the usage of such apps is smaller in percentage terms across the population as a whole than among platform workers, when we look at the actual numbers of 'regular' workers managed by these apps it is clear that they considerably outnumber the app-using platform workers: for every platform worker using such apps there are (depending on country) two or three other users who are *not* platform workers. Strikingly, these practices are much more prevalent among the young. People under the age of 40 are about two thirds more likely to be using these apps than older workers. This suggests that these practices will spread rapidly over time, with new labour market entrants increasingly expected to use them while the earlier adopters age.

In other words, while online platforms may be becoming more and more like regular employers, as they are forced to adapt their practices in response to workers' demands and the requirements of regulators, many regular employers are becoming more and more like online platforms. It is now common for full-time employees to be expected to check for emails and text messages outside working hours, thus extending their working day, to be reliant on 'apps' on their phones, tablets or laptops to tell them what work is waiting for them and when, to have to log their working hours using online 'apps', to have their movements tracked by GPS (Global Positioning Systems) and all their messages recorded, to communicate with managers, colleagues or customers via standardised digital interfaces, to be monitored, and sometimes paid, on the basis of meeting standard performance targets and achieving customer ratings above a certain level and to have to pitch for each piece of new work in competition with others. It could be argued that a new model of work is spreading, in which workers are increasingly expected to be available on demand, managed digitally and expected to subordinate their own needs unquestioningly to those of customer or clients, carrying out work that has been reduced to

standardised, measurable tasks. It is a workforce where there is a growing mismatch between workers' qualifications and skills and what they are actually doing to earn a living: where arts graduates work in coffee bars, economists with doctoral degrees drive taxis, nurses top up their incomes doing evening bar work and skilled production workers stack shelves in supermarkets.

The new model of work can thus be seen as one in which workers are increasingly atomised and disenfranchised while simultaneously, in an apparent paradox, being more tightly controlled and interconnected than at any previous time in history, thanks to digital technologies. Their work is 'logged' in three different sense of the word. Just as the complex branching structures of trees are chopped into uniformly shaped and sized logs, work is 'logged' by being fragmented into standardised units. It is also 'logged' in the sense of being minutely monitored and tracked, just as a ship's movements were recorded in the days before GPS to enable its management, operation and navigation. And many twenty-first century workers must also be 'logged in' as a normal part of their labour processes, to ensure constant real-time digital communication with managers, colleagues and clients.

This expanding population of the working poor cannot be categorised simply as a reserve army of unorganised workers. There is no longer any simple correlation between being low-paid, on-call and prepared to accept just about any extra work that is available and being nonunionised. In the UK, for example, according to ONS, in 2016 52.7% of public sector workers were unionised compared with 13.4% of private sector workers.[27] Yet public sector workers have been amongst those hardest hit by austerity and neo-liberal labour market policies. Pay freezes have reduced their wages in real terms, savage spending cuts have led to overwork including unpaid overtime,[28] while outsourcing has reduced their bargaining power. A 2016 survey by the public sector trade union UNISON found public sector

[27] Department for Business, Energy and Industrial Strategy (2016) *Trade Union Membership, 2016*, London: Department for Business, Energy and Industrial Strategy: 13. Accessed on December 16, 2018 from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/616966/trade-union-membership-statistical-bulletin-2016-rev.pdf.

[28] Zientek, H. (2017) 'How Public Sector Workers Are Gifting Their Employers Almost a QUARTER of Their Annual Salary', *ExaminerLive*, July 26. Accessed on December 16, 2018 from: https://www.examinerlive.co.uk/news/how-public-sector-workers-gifting-13385294.

workers pawning their possessions, taking out payday loans, borrowing from friends and family and turning to food banks in order to make ends meet.[29] It is not surprising, then, that these workers can be found among those using online platforms to top up their incomes, or taking on extra shifts via agencies to top up their regular salaries. Many of the new working poor, in other words, are unionised workers.

Coherent occupational identities dissolve in the construction of curriculum vitae that are made up of pick-and-mix assemblages of increasingly generic skills, evaluated by star-ratings awarded by strangers. Especially for young people habituated to measuring their self-worth by 'likes' on social media postings, and taught by television talent shows that 'there can only be one winner' and that judges' decisions are unchallengeable, the competitive logic of this marketplace is difficult to resist.

There is a continuous battering of self-esteem and deprofessionalisation that, especially in a context of insecurity and disentitlement, takes a heavy toll. Even when workers are organised and have permanent contracts, pressures to meet performance targets lead to stress and unpaid overtime and have been associated with high rates of mental illness in some professions, such as academic work.[30] When confronted with evidence that customers (students, in the case of academics, patients in the case of hospitals, callers in the case of call-centre workers, passengers in the case of transport workers) have given service workers a poor rating it can be difficult even for established trade unions to defend them strongly. Where work is carried out casually, or as a second job, the lack of representation and voice become acute.

However it would be a mistake to conclude from this that workers are passively accepting this situation and sinking into the ranks of an undifferentiated 'precariat'.[31] On the contrary, not only are many insisting on

[29] Unison (2016) *Health Service Workers Resort to Loans and Food Banks After Years of Cash Cuts, UNISON Survey Finds*, London: Unison. Accessed on December 16, 2018 from: https://www.unison.org.uk/news/press-release/2016/10/health-service-workers-resort-to-loans-and-food-banks-after-years-of-cash-cuts-unison-survey-finds/.

[30] Else, H. (2017) 'Academics "Face Higher Mental Health Risk" Than Other Professions', *Times Higher Education*, August 22. Accessed on December 16, 2018 from: https://www.timeshighereducation.com/news/academics-face-higher-mental-health-risk-than-other-professions.

[31] Standing, G. (2011) *The Precariat: The New Dangerous Class*, London: Bloomsbury.

their distinctive occupational identities but they are also developing new forms of resistance, organisation and representation and formulating new demands in an upsurge of grass-roots activity across the globe, from China to the USA, some of which was described in Chapter 4. As I write this, in December 2018, there are news reports that President Macron has given in to several of the demands of the *Gilets Jaunes* street protestors in France and that a co-ordinated strike in the UK at three chains: JD Wetherspoon pubs, MacDonald's fast food outlets and TGI Fridays restaurants had been at least partially successful.[32] A couple of months ago, delivery riders from 31 countries met in Brussels to form the Transnational Courier Federation, after a series of strikes and other actions.[33] Such examples could be multiplied many times.

It would be misguided to imagine that such actions, however numerous, could single-handedly bring capitalism to its knees. Nevertheless, they demonstrate that labour—whose ingenuity and efforts, after all, are what keep capitalism functioning—can never be pummelled into a state of total submission. All the evidence suggests that, once locked into capitalist labour relations, workers begin to resist, to combine, to organise and to make and win demands that lead to greater security, higher earnings and other improvements in their situation. Unorganised workers are part of an organised workforce in the making (even though this may make them, a couple of generations down the line, the targets for new waves of deskilling and undercutting).

But is there some possibility that such efforts could feed into the building of broader solidarities, perhaps even the sorts of alliances between organised labour and the reserve army that, in the mid-twentieth century, delivered those compromises that did at least tame capitalism to some extent, even if they couldn't transform it into an alternative, more equitable economic system?

---

[32] See for example Mortimer, J. (2018) 'Wetherspoons Staff Hail Strike Victory—While Bosses Try and Brush Off Win', *Left Foot Forward*, December 14. Accessed on December 16, 2018 from: https://leftfootforward.org/2018/12/wetherspoons-staff-hail-strike-victory-but-company-claims-pay-hike-due-to-housing-shortage/.

[33] Labournet TV (2018) *Riders Across Europe Unite to form the Transnational Federation of Couriers*. Accessed on December 16, 2018 from: https://en.labournet.tv/riders-across-europe-unite-form-transnational-federation-couriers.

There are certainly many forces stacked against such a possibility. The reaction of the organised working class to globalisation has in many cases unleashed a terrifying crisis of solidarity evidenced in the wave of support for populist parties, often xenophobic that has erupted around the world. This has been visible, for example, in the Brexit referendum in the UK, and the election of Donald Trump in 2016 as well as more recent election results in Austria and France. It may be read in part as a cry of despair from redundant formerly organised industrial workers who feel abandoned and betrayed by the social democratic parties in which they placed their trust in the past, their anger redirected by right-wing parties and the toxic mass media not at the global corporations that are their real enemies but at the desperate members of the reserve army who are their fellow victims but whose immediate interests have been opposed to theirs, objectively speaking, by the ways in which capitalist labour markets operate. It would be wrong to make a simplistic assumption that xenophobia and anti-globalisation are the same thing, of course. Indeed, the *Gilets Jaunes* movement in France provides a vivid example of the political contradictions raised when working people organise to resist neo-liberal employment and taxation policies in the second decade of the twenty-first century: the movement is supported both by the overtly racist National Front party (led by Marine Le Pen) and by left-wing trade unionists as well as many others whose allegiances are less well defined.

Resolving such contradictions will be no easy task. Nevertheless, we may perhaps take some hope from the fact that while new forms of organisation are growing up among the labour market 'outsiders', the labour market 'insiders'—represented by traditional trade unions—are by no means defeated. Although in many countries their membership has dropped since the high tide of the 1970s, trade unions are still very much with us. The International Trade Union Confederation (ITUC), for example, claimed to represent 207 million workers in 163 countries in 2018.[34]

Many of these organised workers undoubtedly still have jobs that are reasonably secure and expect their trade unions to represent the interests of their paying members, including protecting them from undercutting by unorganised and migrant workers and keeping jobs in their present

[34]ITUC (2018). Accessed on December 17, 2018 from: https://www.ituc-csi.org/.

locations to prevent offshore outsourcing. However, as we have seen, even organised 'regular' workers may also be seeing the quality of their working lives deteriorating in other ways too. They may have joined the ranks of 'logged labour', with their work governed by algorithms, standardised, deprofessionalised, speeded-up, intensified and unsatisfying. To the extent that this is the case, they may well be prepared to support demands that address these new challenges, challenges that are also faced by unorganised workers. For example they may be open to campaigning for such things as the right to refuse tasks that are foisted on them at hours that clash with the way they want to conduct their personal lives, rights to be able to challenge negative customer ratings or rights to have control over the way that their personal data are used. There may, in other words, be new possibilities for breaking down some of the historical barriers that have pitted the interests of organised labour against those of the reserve army.

Could there, perhaps, be a basis for demanding a new platform of workers' rights, a platform that is universal, extending right across the labour market to include all dependent workers, whether in permanent jobs or not, whether organised or not? Such an inclusive platform could also clarify and extend other rights that workers have fought for, and won, over the years, such as minimum wages, guaranteed holidays, paid maternity and paternity leave, sick pay, pensions and so on. In insisting on universal coverage, a campaign for such a universal platform would be building on the sorts of solidarity that existed in the mid-twentieth century, when, as I have described earlier in this book, there was for a while a widespread understanding in the general population of many countries that the interests of organised labour and those of the reserve army were not opposed to each other but, if aligned and co-ordinated, could make all parties stronger.

A common platform of workers' rights would not, of course, be enough. But it might help to counter racism and xenophobia and other barriers to unity by making its supporters aware of their common interests and bringing them into direct contact with each other. And in the process it might build the basis for broader political demands. Here again, there might be some lessons to be learned from the mid-twentieth century and the brave aims of the architects of those social democratic welfare states,

to eliminate what the UK social reformer William Beveridge called the five 'giant evils': squalor, ignorance, want, idleness, and disease.[35]

We must be careful neither to romanticise this period nor minimise the many limitations of the welfare states it produced. Life in the 1950s even in the most enlightened welfare states was pretty hellish if, for example, you were black, or gay or unfortunate enough to get pregnant without being married; and working class kids who got scholarships to university or women who aspired to be taken seriously as intellectuals faced condescension and ridicule. Indeed, it was a reaction to such strait-jacketed constraint and bigotry that produced the social movements of the 1960s—for women's liberation, for civil rights, for gay rights, for a democratisation of universities—led by the first generation of products of this post-war welfare state.

In retrospect, many of the demands raised by the radical 60s generation that made their way onto political platforms in the 1970s have been collapsed by idealistic thinkers on the left into a fuzzy unity with those of the 1940s and 1950s—a sort of composite idea of the good old days before neo-liberalism, when the post-Keynesian welfare state is presumed to have constituted some sort of agreed consensus of minimum standards, upon which further progress could be built. Such a view glosses over the extent to which the third quarter of the twentieth century was marked by internal tensions and contradictions, some of which harked back to older tensions within the volatile assemblage of ad hoc coalitions that made up the various social democratic and labour movements over their long and turbulent histories.

One British example is the tension between thinkers, represented in the nineteenth century by followers of John Ruskin and William Morris, who thought work should be meaningful and socially productive and those, many of whom could be found among the trade union ranks, who recognised the degraded nature of much work under capitalism and whose goal was to put in the fewest possible number of working hours for the greatest possible reward—debates which resurfaced in the 1970s in discussions

[35] Beveridge, W. (1942) *Social Insurance and Allied Services ('The Beveridge Report')*, London: Her Majesty's Stationery Office: 6.

about Workers' Alternative Plans and the Institute for Workers Control.[36] Other tensions can be identified relating to women's reproductive labour (should it be socialised? Should there be 'wages for housework'? Or should we rely on social pressure for men to do their share?), to the nationalisation of major industries and to many other issues.

In the collective anger at the social, economic and political damage that has been done by neo-liberalism there is a strong temptation among twenty-first century socialists to try to reassemble the Humpty Dumpty that was smashed, by putting together a rag-bag of demands that hark back both to the realities of the 1950s and the radical aspirations of the 1970s: reversing cuts; renationalising what has been outsourced; restoring lost rights and dusting off demands for peace and disarmament. In my view trying to turn the clock back in this way would be a mistake. We have a historical opportunity to rethink from first principles what a welfare state fit for the twenty-first century could look like and owe it to the victims of neo-liberal globalisation to give it our best shot. This demands something that is both more ambitious than attempting to recreate a patched-up version of the third quarter of the twentieth century (viewed through the rose-tinted glasses of the twenty-first) and more focussed on the specific issues confronting the working class in a globalised digitalised economy dominated by monopolistic transnational corporations.

What can perhaps be salvaged from the twentieth century is the principle of universalism, whether this refers to universal labour rights, universally provided public services, such as health, education, social care and housing and a universal benefit system that ensures that nobody falls into destitution at any stage of their life and all can look forward to a decent and dignified retirement as that life draws to a close. The more changeable and unpredictable the needs of workers as they move in and out of different kinds of work, and the more employers try to play one group off against another, the more important it is that there should be a simple, unconditional, easy-to-understand set of rules and entitlements that apply to everybody. But uniting workers around such universal demands will be

[36] See, for example, Cooley, M. (1982) *Architect or Bee? The Human/Technology Relationship*, Boston: South End Press; Wainwright, H. & D. Elliot (1981) *Lucas Plan: New Trade Unionism in the Making*, Nottingham: Spokesman Books. Accessed on December 18, 2018 from: https://www.workerscontrol.net/theorists/institute-workers%E2%80%99-control.

no easy matter, given the wedges that have been inserted between them by popular discourses that demonise immigrants, welfare scroungers and any group deemed deviant.

Bringing it into being will involve not only building alliances among very different workers and their representatives, including the newly organising as well as the traditional trade unions, but also among the many other social movements that have sprung up in the twenty-first century that perceive their members' interests to be threatened by capitalist accumulation, or the policies of the conservative governments that support the agendas of the global corporations. These include movements for indigenous peoples' rights, movements to resist the destruction of the environment, anti-racist movements, movements to support the rights of refugees, movements for gay and trans peoples' rights, movements against violence against women and many more.

It is important to remember that these movements are made up of women and men who work, in some capacity or other, in at least one of the six categories of labour I have described in this book, and mostly in more than one. Their lives have many other facets too, and some may not even regard themselves as workers, but it is my contention that if we want to build such alliances one crucial first step is to develop an understanding of how each individual is involved either directly or indirectly in producing value for capitalists, and the relationship between that objective class position and that individual's subjective class consciousness. A starting point for this might be a mapping of each individual's labour across the six categories of labour presented in Table 2.1 which could, perhaps, be used a tool for consciousness raising as well as for analysing where common interests with other workers might be identified, and in which capacities. Some such analysis is a necessary precondition for understanding how new solidarities can develop across national, ethnic and other boundaries.

Another important step is to look, not just at the paid labour that keeps the global economy going but also at the unpaid reproductive labour that underpins it. Traditional feminist strategies have depended variously on demands for socialisation of reproductive labour through public services, on the payment of a wage for carrying out housework, or on the belief that new technologies will be able to automate this labour out of existence. History shows us that all of these strategies are limited in a context in which

the development of capitalism continues to find new means to commodify social reproduction through the market.

We therefore need to develop new demands for socialising reproductive labour in an equitable way.

Might there, for example, be ways that the new forms of organisation of social reproductive work, such as online platforms, could be repurposed to bring work back into the public sphere, for example by developing municipal platforms that could be used to deliver food to the elderly and infirm and provide cleaning and caring services on the basis of need, and using workers who are decently paid and rewarded?

Developing alternative plans for socialising reproductive labour will involve looking at *all* labour, paid or unpaid, and who carries it out, and how, and working out a way that this reproductive labour is not only socially recognised and decently rewarded but that the people who bear most responsibility for it can have satisfying lives in which there is respite from work, a life in which paid labour is balanced with the unstressed enjoyment of relationships, and in which creativity can flourish.

Such plans will only benefit labour if they are drawn up and implemented with the active involvement of workers themselves, and those who represent them—a major political challenge. To the extent that they manage to gain this democratic access to social decision-making, current and future workers will have it in their power to shape the future of work. For the sake of their children and grandchildren, and for the sake of the planet, let's hope that they succeed.

Bibliography

Accenture (2016) 'Liquid Workforce: Building the Workforce for Today's Digital Demands', *Technology Vision*, Accenture. Accessed on May 5, 2017 from: https://www.accenture.com/fr-fr/_acnmedia/PDF-2/Accenture-Liquid-Workforce-Technology-Vision-2016-france.pdf.

Aglietta, M. (1976) *Crises et régulation du capitalisme*, Paris: Calmann-Lévy.

Altvater, E. (2007) 'Conceptualising Globalisation: Fossil Energy, Global Finance and the Labour Market', *Work Organisation, Labour & Globalisation*, I (2): 5–14.

Altvater, E. & B. Mahnkopf (2002) *Globalisierung der Unsicherheit – Arbeit im Schatten, schmutziges Geld und informelle Politik*, Münster: Westfälisches Dampfboot.

Armenti, J. (2014) 'Click-Work or Click-Play: Crowdsourcing and the Work-Leisure Distinction', Seton Hall University, Law School Student Scholarship. 137. Accessed on May 9, 2018 from: http://scholarship.shu.edu/student_scholarship/137.

Armstrong and Associates (2013) 'Eighty Six Percent of the Fortune 500 Use 3PLs as Global Market', *MHI*, July 12. Accessed on June 11, 2014 from: http://www.mhi.org/media/news/12685.

Atkinson, W. & K. Randle (2014) 'Sorry Mate, You're Finishing Tonight': A Historical Perspective on Employment Flexibility in the UK Film Industry', *Work Organisation, Labour and Globalisation*, 8 (1): 49–68.

U. Huws, *Labour in Contemporary Capitalism*, Dynamics of Virtual Work,
https://doi.org/10.1057/978-1-137-52042-5

Banks, J. & S. Humphreys (2008) 'The Labor of User Co-creators', *Convergence*, 14 (4): 401–418.
Banks, M., R. Gill & S. Taylor (2013) *Theorizing Cultural Work*, Abingdon: Routledge.
Barbrook, R. (2006) *The Class of the New*, London: Mute Publishing.
Bauwens, M. (2005) 'The Political Economy of Peer Production', *ctheory.net.* Accessed on May 9, 2018 from: https://journals.uvic.ca/index.php/ctheory/article/view/14464/5306.
Beiler, A., I. Lindberg & D. Pillay (2008) *Labour and the Challenges of Globalization: What Prospects for Transnational Solidarity?*, London: Pluto Press.
Belghazi, S. (2006) in U. Huws, A. Dhudwar & S. Dahlmann, *The Transformation of Work in a Global Knowledge Economy: Towards a Conceptual Framework*, proceedings of conference held in Chania, Greece, September 21–22, Higher Institute of Labour Studies, Leuven, 247–251.
Bell, D. (1976) *The Coming of Post-industrial Society*, New York: Basic Books.
Benkler, Y. (2004) 'Sharing Nicely: On Shareable Goods and the Emergence of Sharing as a Modality of Economic Production', *The Yale Law Journal*, 114: 273–358.
Bettio, F., A. Simonazzi & P. Villa (2006) 'Change in Care Regimes and Female Migration: The "Care Drain" in the Mediterranean', *Journal of European Social Policy*, 16 (3): 271–285.
Beveridge, W. (1942) *Social Insurance and Allied Services ('The Beveridge Report')*, London: Her Majesty's Stationery Office: 6.
Beynon, H. (1975) *Working for Ford*, Wakefield: E.P. Publishing.
Black, A. (2017) *Guild and State: European Political Thought from the Twelfth Century to the Present*, London: Transaction Publishers.
Blair, H., S. Grey & K. Randle (2001) 'Working in Film: Employment in a Project Based Industry', *Personnel Review*, 30 (2): 170–185.
Booth, R. (2016) 'More Than 7m Britons Now in Precarious Employment', *The Guardian*, November 15.
Botsman, R. & R. Rogers (2010) *What's Mine Is Yours: The Rise of Collaborative Consumption*, New York: Harper Business.
Bourdieu, P. (1983) 'Forms of Capital' in J. C. Richards (ed.) *Handbook of Theory and Research for the Sociology of Education*, New York: Greenwood Press.
Braudel, F. (1967–1979) *Civilization and Capitalism, 15th–18th Century*, London: Harper.
Braverman, H. (1974) *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century*, New York: Monthly Review Press.

Brockman, J. (1996) *Digerati: Encounters with the Cyber Elite*, London: Orion Business Publishing.

Broughton, A., M. Green, C. Rickard, S. Swift, W. Eichhorst, V. Tobsch, I. Magda, P. Lewandowski, R. Keister, D. Jonaviciene, N. E. Ramos Martín, D. Valsamis & F. Tros (2016) *Precarious Employment in Europe: Part 1: Patterns, Trends and Policy Strategy*, Brussels: European Parliament Briefing. Accessed on May 18, 2018 from: http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/587303/IPOL_BRI%282016%29587303_EN.pdf.

Burawoy, M. (1979) *Manufacturing Consent*, Chicago: University of Chicago Press.

Burawoy, M. (1982) *Manufacturing Consent: Changes in the Labor Process Under Monopoly Capitalism*, Chicago: University of Chicago Press.

Burston, J., N. Dyer-Witheford & A. Hearn (2010) 'Digital Labour: Workers, Authors, Citizens', *Ephemera*, 10 (3/4): 214–221.

Butler, P. (2015) 'Sanctions: Staff Pressured to Penalise Benefit Claimants, Says Union', *The Guardian*, February 3. Accessed on October 6, 2018 from: https://www.theguardian.com/society/patrick-butler-cuts-blog/2015/feb/03/sanctions-staff-pressured-to-penalise-benefit-claimants-says-union.

Butler, S. (2018) 'Initiative to Crack Down on Unpaid Internships Launched in UK', *The Guardian*, February 8. Accessed on December 15, 2018 from: https://www.theguardian.com/society/2018/feb/08/initiative-to-crack-down-on-unpaid-internships-launched-in-uk.

Cairncross, F. (1997) *The Death of Distance: How the Communications Revolution Will Change Our Lives*, Boston, MA: Harvard Business School Press.

Caraway, B. (2018) 'Collective Action Frames and the Developing Role of Discursive Practice in Worker Organisation: The Case of OUR Walmart', *Work Organisation, Labour and Globalisation*, 12 (1): 7–24.

Castells, M. (1996) *The Rise of the Network Society: The Information Age: Economy, Society, and Culture*, Volume I, Oxford: Blackwell Publishers.

Chan, C. (2016) 'Labor Rights Movements Gaining Momentum in China', *dw.com*, January 5. Accessed on August 24, 2018 from: https://www.dw.com/en/labor-rights-movements-gaining-momentum-in-china/a-18959557.

Christopher, M. (2013) *Logistics and Supply Chain Management*, Harlow: Pearson: 6.

Clifton, J. & D. Diaz-Fuentes (2008) 'The New Public Service Transnationals: Consequences for Labour', *Work Organisation, Labour & Globalisation*, 2 (2): 23–39.

CNN Money (2015) 'Etsy Now Worth Over $3 Billion. Stock Jumps 88% After IPO' Stockswatch, April 16. Accessed on August 24, 2015 from: http://money.cnn.com/2015/04/15/investing/etsy-ipo-16-a-share-wall-street/.

Coates, D. (2000) *Models of Capitalism: Growth and Stagnation in the Modern Era*, Cambridge: Polity Press.

Cohen, R. (2006) *Migration and Its Enemies: Global Capital, Migrant Labour and the Nation State*, Aldershot: Ashgate.

Cooley, M. (1982) *Architect or Bee? The Human/Technology Relationship*, Boston: South End Press.

Cox, R. (1992) 'Global Perestroika', *Socialist Register*, 28: 26–43.

Coyle, D. (1997) *Weightless World: Strategies for Managing the Digital Economy*, Oxford: Capstone Publishing.

Cribb, J., R. Disney & L. Sibieta (2014) *The Public Sector Workforce: Past, Present and Future*, IFS Briefing Note BN145, London: Institute for Fiscal Studies.

CSE Microelectronics Group (1980) *Capitalist Technology and the Working Class*, London: CSE Books.

Dahlmann, S. (2008) 'The End of the Road, No More Walking in Dead Men Shoes: IT Professionals' Experience of Being Outsourced to the Private Sector', *Work Organisation, Labour and Globalisation*, 2 (2): 148–161.

Davenport, T. H. & J. C. Beck (2002) *The Attention Economy: Understanding the New Currency of Business*, Cambridge, MA: Harvard Business Press.

D'Cruz, P. & E. Noronha (2009) 'Experiencing Depersonalised Bullying: A Study of Indian Call-Centre Agents', *Work Organisation, Labour & Globalisation*, 3 (1): 27–46.

D'Cruz, P. & E. Noronha (2016) 'Positives Outweighing Negatives: The Experiences of Indian Crowdsourced Workers', *Work Organisation, Labour and Globalisation*, 10 (1): 44–63.

Dean, J. (2005) 'Communicative Capitalism: Circulation and the Foreclosure of Politics', *Cultural Politics*, 1 (1): 51–74.

Deng, X. N. & K. D. Joshi. (2016) 'Why Individuals Participate in Micro-task Crowdsourcing Work Environment: Revealing Crowdworkers' Perceptions', *Journal of the Association for Information Systems*, 17 (10): 648–673. Clickworker is also the name of an online platform based in Germany.

Department for Business, Energy and Industrial Strategy (2016) *Trade Union Membership*, London: Department for Business, Energy and Industrial Strategy: 13. Accessed on December 16, 2018 from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/616966/trade-union-membership-statistical-bulletin-2016-rev.pdf.

Department of Trade and Industry (2004) *Trade and Investment White Paper: Making Globalisation a Force for Good*, London, DTI, November 10.

de Peuter, G., N. Cohen & E. Brophy (2012) 'Interns Unite! (You Have Nothing to Lose—Literally)', *Briarpatch.* Accessed on December 15, 2018 from: https://briarpatchmagazine.com/articles/view/interns-unite-you-have-nothing-to-lose-literally.

De Stefano, V. (2016) *The Rise of the 'Just-in-Time Workforce': On-Demand Work, Crowdwork and Labour Protection in the 'Gig-Economy'*, Geneva: International Labour Office.

Dhar, A. (2015) *Work Experience Schemes*, Briefing Paper 06249. London: House of Commons Library, June 25.

Doeringer, P. B. & M. J. Piore (1971) *Internal Labor Markets and Manpower Analysis*, Lexington, MA: D.C. Heath and Company.

Dohsem, K., U. Jürgens & T. Malsch (1985) 'From "Fordism" to "Toyotism"? The Social Organization of the Labor Process in the Japanese Automobile Industry', *Politics & Society*, 14 (2): 115–146.

Drucker, P. F. (1966) *The Effective Executive*, New York: Harper and Row.

Durkheim, E. (1893) *Division of Labour in Society* (republished in 1997, New York: The Free Press).

Dyer-Witheford, N. (2015) *Cyber-Proletariat: Global Labour in the Digital Vortex*, London: Pluto Press.

Ehrenreich, B. & A. R. Hochschild (2004) *Global Woman: Nannies, Maids and Sex Workers in the New Economy*, New York: Henry Holt.

Else, H. (2017) 'Academics 'Face Higher Mental Health Risk' Than Other Professions', *Times Higher Education*, August 22. Accessed on 16 December, 2018 from: https://www.timeshighereducation.com/news/academics-face-higher-mental-health-risk-than-other-professions.

Engels, F. (1877) *On Marx's Capital*, Moscow: Progress Publishers (English edition, 1956): 89.

Equal Opportunities Commission (1995) *The Gender Impact of CCT in Local Government*, Manchester: Equal Opportunities Commission.

Equal Pay Act: An Act to Prevent Discrimination, as Regards Terms and Conditions of Employment, Between Men and Women, 1970, Parliament of the United Kingdom.

Esping-Andersen, G. (1990) *The Three Worlds of Welfare Capitalism*, Cambridge: Polity Press.

Eubanks, N. (2017) 'The True Cost of Cybercrime for Businesses', *Forbes*, July 13. Accessed on May 20, 2018 from: https://www.forbes.com/sites/theyec/2017/07/13/the-true-cost-of-cybercrime-for-businesses/#182086b54947.

European Commission (2017) *Working Document Accompanying Second Phase Consultation Document of Special Partners Under Article 154 TFEU*, Brussels: European Commission Directorate General for Social Affairs, November 20. Accessed on January 28, 2018 from: http://ec.europa.eu/social/main.jsp?catId=1312&langId=en.

Feedough (2018) *Duolingo Business Model: How Does Duolingo Make Money?* Accessed on November 25, 2018 from: https://www.feedough.com/duolingo-business-model-how-does-duolingo-make-money/.

Fourastie, J. (1979) *Les Trente Glorieuses, ou la révolution invisible de 1946 à 1975*, Paris: Fayard.

Friedman, G. (2014) 'Workers Without Employers: Shadow Corporations and the Rise of the Gig Economy', *Review of Keynesian Economics*, 2 (2): 171–188.

Fudge, J. & C. Hobden (2018) Conceptualizing the Role of Intermediaries in Formalizing Domestic Work, Conditions of Work and Employment Series No. 95, Geneva: International Labour Organization.

Full Fact (n.d.) Accessed on February 11, 2019 from: https://fullfact.org/economy/tax-credits-how-much-has-spending-increased-16-years/.

Gandini, A. (2016) *The Reputation Economy: Understanding Knowledge Work in Digital Society*, London: Palgrave Macmillan.

Gandini, A., I. Pais & D. Beraldo (2016) 'Reputation and Trust on Online Labour Markets: The Reputation Economy of Elance', *Work Organisation, Labour and Globalisation*, 10 (1): 27–43.

Gansky, L. (2010) *The Mesh: Why the Future of Business Is Sharing*, London: Portfolio Penguin.

Gordon, R. J. (2000) 'Does the "New Economy" Measure Up to the Great Inventions of the Past?', *Journal of Economic Perspectives.* American Economic Association. 14 (4): 49–74.

Gorz, A. (1982) *Farewell to the Working Class*, London: Pluto Press.

Gorz, A. (1985) *Paths to Paradise: On the Liberation from Work*, London: Pluto Press.

Gothoskar, S. (2007) 'Workers' Knowledge in the "Knowledge Society": Voices from the South', *Work Organisation, Labour and Globalisation*, 1 (2): 168–177.

Graham, S. (1998) 'The End of Geography or the Explosion of Place? Conceptualizing Space, Place and Information Technology', *Progress in Human Geography*, 22 (2): 165–185.

Green, A., M. de Hoyos, S.-A. Barnes, B. Baldauf & H. Behle (2014) *Exploratory Research on Internet-Enabled Work Exchanges and Employability: Analysis and Synthesis of Qualitative Evidence on Crowdsourcing for Work, Funding and Volunteers*, Seville: EU Science Hub. Acccesses on October 3, 2018

from: https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/exploratory-research-internet-enabled-work-exchanges-and-employability-analysis-and.

Greenfield, J. (2013) 'Amazon Partners with U.S. Post Office to Deliver Packages on Sunday', *Forbes*, November 11. Accessed on June 9, 2014 from: http://www.forbes.com/sites/.

Gurstein, P. (2007) 'Navigating the Seamless Environment in the Global Supply Chain: Implications for Canadian Regions and Workers', *Work Organisation, Labour and Globalisation*, 2 (1): 76–97.

Hales, M. (1980) *Living Thinkwork: Where Do Labour Processes Come From?*, London: Free Association Books.

Hall, P. A. & D. Soskice (2001) *Varieties of Capitalism*, Oxford: Oxford University Press.

Hanley, K. (2018) 'Amazon and Alibaba Compete for Global Market Dominance,' *Digital Journal*, March 5. Accessed on August 8, 2018 from: http://www.digitaljournal.com/business/amazon-and-alibaba-compete-for-global-market-dominance/article/516532.

Hardt, T. & A. Negri (2001) *Empire*, Cambridge, MA: Harvard University Press.

Hardt, T. & A. Negri (2009) *Multitude: War and Democracy in the Age of Empire*, London: Penguin.

Harman, C. (1979) *Is a machine After Your Job? New Technology & the Struggle for Socialism*, London: Socialist Workers Party.

Harvey, D. (1990) *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change*, Cambridge, MA: Blackwell.

Harvey, D. (2003) *The New Imperialism*, Oxford: Oxford University Press.

Hesmondhalgh, D. & S. Baker (2011) 'A Very Complicated Version of Freedom' Conditions and Experiences of Creative Labour in Three Cultural Industries', *Variant*, 41: 34–38, Spring.

Hochschild, A. (1983) *The Managed Heart: The Commercialization of Human Feeling*, Berkeley: University of California Press.

Hof, R. (2012) 'Jeff Bezos: How Amazon Web Services Is Just Like The Kindle Business', *Forbes*, November 29. Accessed on June 10, 2014 from: http://www.forbes.com/sites/roberthof/2012/11/29/jeff-bezos-how-amazon-web-services-is-just-like-the-kindle-business/.

Hondagneu-Soteko, P. (2001) *Doméstica: Immigrant Workers Cleaning and Caring in the Shadows of Affluence*, Berkeley: University of California Press.

Howe, J. & M. Robinson (2005) 'The Rise of Crowdsourcing', *Wired*, Issue 14.06, June.

https://iwgb.org.uk/.

https://www.iso.org/standards-catalogue/.
Hughes, J. (2004) *Citizen Cyborg: Why Democratic Societies Must Respond to the Redesigned Human of the Future*, Cambridge, MA: Westview Press.
Hunt, M. G., R. Marx, C. Lipson & J. Young (2018) 'No More FOMO: Limiting Social Media Decreases Loneliness and Depression', *Journal of Social & Clinical Psychology*, 37 (10): 751–768.
Huws, U. (1982) 'Domestic Technology: Liberator or Enslaver?', *Scarlet Women*, 14. Reprinted in Kanter, H., S. Lefanu & S. Spedding (eds.) (1984) *Sweeping Statements: Writings from the Women's Liberation Movement 1981–1983*, London: The Women's Press.
Huws, U. (1984) *The New Homeworkers: New Technology and the Changing Location of White-Collar Work*, London: Low Pay Unit.
Huws, U. (1985) 'A Very Ordinary Picket', *New Socialist*, January: 8–10.
Huws, U. (2003) *The Making of a Cybertariat: Virtual Work in a Real World*, New York: Monthly Review Press.
Huws, U. (2006a) 'Fixed, Footloose or Fractured: Work, Identity and the Spatial Division of Labour', *Monthly Review*, 57 (10): 34, March.
Huws, U. (2006b) 'What Will We Do? The Destruction of Occupational Identities in the "Knowledge-Based Economy"', *Monthly Review*, 57 (8): 1–8, January.
Huws, U. (2007) 'The Spark in the Engine: Creative Workers in a Global Economy', *Work Organisation, Labour and Globalisation*, 1 (1), on which this chapter draws in part.
Huws, U. (2008) 'The New Gold Rush: Corporate Power and the Commodification of Public Sector Work,' *Work Organisation, Labour and Globalisation*, 2 (2): 1–8.
Huws, U. (2010) 'Expression and Expropriation: The Dialectics of Autonomy and Control in Creative Labour', *Ephemera* 10 (3/4): 504–521: 504. This article is another source from my already-published work on which this chapter draws.
Huws, U. (2012) 'Crisis as Capitalist Opportunity: New Accumulation Through Public Service Commodification', *Socialist Register*, 48: 64–84.
Huws, U. (2013a) 'The Reproduction of Difference: Gender and the Global Division of Labour', *Work Organisation, Labour and Globalisation*, 6 (1): 1–10.
Huws, U. (2013b) *Labor in the Global Digital Economy: The Cybertariat Comes of Age*, New York: Monthly Review Press.
Huws, U. (2014a) *Labor in the Global Digital Economy: The Cybertariat Comes of Age*, New York: Monthly Review Press.

Huws, U. (2014b) 'The Underpinnings of Class in the Digital Age: Living, Labour and Value', *Socialist Register*, 50: 80–107 and subsequently developed further elsewhere.
Huws, U. (2015a) 'Saints and Sinners: Lessons About Work from Daytime TV', *International Journal of Media & Cultural Politics*, 11 (2): 143–163.
Huws, U. (2015b) 'Shifting Boundaries: Gender, Labor and New Information and Communication Technology' in C. Carter, L. Steiner & L. McLaughlin (eds.) *Routledge Companion to Media & Gender*, London: Routledge: 147–157.
Huws, U. (2015c) *Online Labour Exchanges, or 'Crowdsourcing': Implications for Occupational Safety and Health*, Bilbao: European Occupational Safety and Health Agency.
Huws, U. (2016) 'Logged Labour: A New Paradigm of Work Organisation?', *Work Organisation, Labour and Globalisation*, 10 (1): 7–26.
Huws, U. (2017) 'Where Did Online Platforms Come From? The Virtualization of Work Organization and the New Policy Challenges It Raises' in P. Meil & V. Kirov (eds.) *The Policy Implications of Virtual Work*, Palgrave Macmillan: 29–48.
Huws, U. & J. Flecker (2004) *Asian Emergence: The World's Back Office?*, Brighton: Institute for Employment Studies.
Huws, U. & S. Dahlmann (2007) 'Global Restructuring of Value Chains and Class Issues' in proceedings of ISA Conference: *Work and Employment: New Challenges*, Montreal, August 28–30.
Huws, U., P. Hatzopoulos & N. Kambouri (2014) 'The Containment of Labour in Accelerated Global Supply Chains: The Case of Piraeus Port', *Work Organisation, Labour and Globalisation*, 8 (1): 5–21.
Huws, U, N. H. Spencer, D. S. Syrdal & K. Holts (2017) *Work in the European Gig Economy: Research Results from the UK, Sweden, Germany, Austria, the Netherlands, Switzerland and Italy*, Brussels: Foundation for European Progressive Studies.
Illich, I. (1973) *Tools for Conviviality*, London: Marion Boyars.
Illich, I. (1978) *The Right to Useful Unemployment*, London: Marion Boyars.
Illich, I. (1982) *Gender*, New York: Pantheon Books.
International Labour Organization (2015) *World Employment Social Outlook: The Changing Nature of Jobs*, Geneva: ILO: 1.
International Labour Organization (2018) Who Are Domestic Workers? Geneva, International Labour Organization. Accessed on November 3, 2018 from: https://www.ilo.org/global/topics/domestic-workers/who/lang–en/index.htm.
ITUC (2018) Accessed on December 17, 2018 from: https://www.ituc-csi.org/.

Jessop, B. (1990) *State Theory: Putting the Capitalist State in Its Place*, Cambridge: Polity.

Julius, D. (2008) *Public Services Industry Review*, London: Department for Business Enterprise and Regulatory Reform.

Kaganer, E., E. Carmel, R. Hirschheim & T. Olsen (2012) 'Managing the Human Cloud', *MIT Sloan Management Review*, December 18: 10–14.

Kelly, T. (1966) *A Competitive Cinema*, London: The Institute of Economic Affairs.

Kenney, M. & J. Zysman (2016) 'Choosing a Future in the Platform Economy: The Implications and Consequences of Digital Platforms', *Issues in Science and Technology*, XXXII (3). Accessed on May 9, 2018 from: http://issues.org/32-3/the-rise-of-the-platform-economy/.

Kirby, J. & T. A. Stewart (2007) 'The Institutional Yes: An Interview with Jeff Bezos', *Harvard Business Review Magazine*, October. Accessed on June 10, 2014 from: http://hbr.org/2007/10/theinstitutional-yes/ar/1.

Kleinbard, D. (2000). 'The $1.7 Trillion Dot.Com Lesson', CNNMoney, November 9.

Kollewe, J. (2016) 'Britain's Agency Workers Underpaid and Exploited, Think-tank Says', *The Guardian*, December 5. Accessed on December 16, 2018 from: https://www.theguardian.com/business/2016/dec/05/britains-agency-workers-underpaid-and-exploited-thinktank-says.

Kollowe, J. & N. Slawson (2017) 'McDonald's Workers to Go on Strike in Britain for First Time', *The Guardian*, September 4. Accessed on August 24, 2018 from: https://www.theguardian.com/business/2017/sep/04/mcdonalds-workers-strike-cambridge-crayford.

Kraft, J. P. (1996) *Stage to Studio: Musicians and the Sound Revolution, 1890–1950*, *Studies in Industry and Society* 9, Baltimore: Johns Hopkins University Press.

Kücklich, J. (2005) 'Precarious Playbour: Modders and the Digital Games Industry', *The Fibreculture Journal*, 5. Accessed on May 9, 2018 from: http://five.fibreculturejournal.org/fcj-025-precarious-playbour-modders-and-the-digital-games-industry/.

Labournet TV (2018) *Riders Across Europe Unite to form the Transnational Federation of Couriers*. Accessed on December 16, 2018 from: https://en.labournet.tv/riders-across-europe-unite-form-transnational-federation-couriers.

Lebedev, M. A. & M. A. L. Nicoleis (2006) 'Brain–Machine Interfaces: Past, Present and Future', *TRENDS in Neurosciences*, 29 (9): 536–546.

Legault, M.-J. (2013) 'IT Firms' Working Time (De)regulation Model: A By-Product of Risk Management Strategy and Project-Based Work Management', *Work Organisation, Labour and Globalisation*, 7 (1): 76–94.

Lewis, J. (1993) *Women and Social Policies*, London: Edward Elgar.
Leys, C. (2003a) *Market-Driven Politics*, London: Verso.
Leys, C. (2003b) *Market-Driven Politics: Neoliberal Democracy and the Public Interest*, London: Verso.
Liddington, J. & J. Norris (1978) *One Hand Tied Behind Us: The Rise of the Women's Suffrage Movement*, London: Virago.
Lim, T. W., H. Chan, K. Tseng & W. X. Lim (2014) *China's One Belt One Road Initiative*, London: Imperial College Press.
Lipietz, A. & D. Macey (1987) *Mirages and Miracles: Crisis in Global Fordism*, London: Verso.
Lukacs, G. ([1920] 1967) *History & Class Consciousness*, London: Merlin Press.
Luttwak, E. (1999) *Turbo Capitalism: Winners and Losers in the Global Economy*, London: Orion Business Publishing.
Makimoto, T. & D. Manners (1997) *Digital Nomads*, Chichester: Wiley.
Mandl, I. (2014) European Foundation for the Improvement of Living & Working Conditions, 'Status Quo and First Findings on Crowd Employment and ICT Based, Mobile Work', presentation to Dynamics of Virtual Work (COST Action IS 1202) Meeting, University of Bucharest, March 28, 2014.
Mandl, I., M. R. Curtarelli, S. Riso, O. L. Vargas & E. Gerogiannis (2015) *New Forms of Employment*, Dublin: Eurofound.
Marglin, S. A. & J. B. Schor (1992) *The Golden Age of Capitalism: Reinterpreting the Postwar Experience*, Oxford: Oxford University Press.
Marx, K. (1844) 'Estranged Labour', *Economic and Philosophical Manuscripts of 1844*, First Manuscript. Retrieved on June 8, 2018 from: https://www.marxists.org/archive/marx/works/1844/manuscripts/labour.htm.
Marx, K. (1845) 'Division of Labour and Forms of Property—Tribal, Ancient, Feudal' in Part 1, A, *German Ideology*. Accessed February 1, 2012 from: http://www.marxists.org/archive/marx/works/1845/german-ideology/ch01a.htm#5a3.
Marx, K. (1861–1864) 'Productive and Unproductive Labour', *Economic Manuscripts*, Chapter 2. Accessed on January 20, 2013 from: https://www.marxists.org/archive/marx/works/1864/economic/ch02b.htm.
Marx, K. (1867) *Capital*. Accessed August 18, 2012 from: http://www.marxists.org/archive/marx/works/1867-c1.
Marx, K. (1973) *Grundrisse*, Harmondsworth: Penguin. Retrieved on August 23, 2010 from: http://www.marxists.org/archive/marx/works/1857/grundrisse/ch12.htm#p610.

Marx, K. & F. Engels (1848) *Manifesto of the Communist Party*. Retrieved on May 10, 2018 from: https://www.marxists.org/archive/marx/works/download/pdf/Manifesto.pdf.

Mason, P. (2015) *PostCapitalism: A Guide to Our Future*, London: Penguin.

Matthews, D. (1991) '1889 and All That: New Views on the New Unionism', *International Review of Social History* 36 (1): 24–58.

McAlister, A. R. & T. B. Cornwell (2010) 'Children's Brand Symbolism Understanding: Links to Theory of Mind and Executive Functioning', *Psychology & Marketing*, 27 (3): 203–228.

McKercher, C. & V. Mosco (2006) 'Divided They Stand: Hollywood Unions in the Information Age', *Work Organisation, Labour & Globalisation*, 1 (1) 130–143.

McKinsey Global Institute (2004) *Offshoring: Is It a Win-Win Game?* Accessed on November, 2004 from: http://www.McKinsey.com.

McKinsey Global Institute (2015) *A Labor Market that Works: Connecting Talent with Opportunity in the Digital Age*, McKinsey & Company. Accessed on May 9, 2018 from: https://www.mckinsey.com/featured-insights/employment-and-growth/connecting-talent-with-opportunity-in-the-digital-age.

Meagher, K. (2018) 'What Is the Difference Between Google Express and Google Shopping?', *Acquisio*, May 3. Accessed on August 8, 2018 from: https://www.acquisio.com/blog/agency/difference-between-google-express-google-shopping/.

Meyer, C. & S. Davis (1998) *Blur: The Speed of Change in the Connected Economy*, South Port: Addison-Wesley.

Miller, H. & T. Pope (2016) *The Changing Composition of UK Tax Revenues*, London: Institute for Fiscal Studies: 4.

Moore, M. (2015) 'How to Stop the Tech Giants Turning Us into Techo-Serfs', *New Statesman*, February 9. Accessed on May 9, 2018 from: https://www.newstatesman.com/sci-tech/2015/02/how-stop-tech-giants-turning-us-techo-serfs.

Moroni, C. & A. Fumagalli (2010) 'Life Put to Work: Towards a Life Theory of Value', *Ephemera*, 10 (3/4): 234–252.

Morris, W. (1990) *News from Nowhere*, Chapter 15: 'On the Lack of Incentive to Labour in a Communist Society'. Retrieved on November 2, 2006 from the William Morris Internet Archive: http://www.marxists.org/archive/morris/works/1890/nowhere/chapters/chapter15.htm.

Mortimer, J. (2018) 'Wetherspoons Staff Hail Strike Victory—While Bosses Try and Brush Off Win', *Left Foot Forward*, December 14. Accessed on December

16, 2018 from: https://leftfootforward.org/2018/12/wetherspoons-staff-hail-strike-victory-but-company-claims-pay-hike-due-to-housing-shortage/.
Moulier-Boutang, Y. (2012) *Cognitive Capitalism*, Oxford: Polity Press.
Muhic, M. & B. Johansson (2014) 'Cloud Sourcing—Next Generation Outsourcing?', *Procedia Technology*, 16: 553–561.
Murphy, R. (2010) 'Is VAT Regressive and If so Why Do the IFS Deny It?' *Tax Research UK*: 4.
National Audit Office (2013a) *The Role of Major Contractors in the Delivery of Public Services*, Memorandum for Parliament, HC 810 Session 2013–14, 12 November: 5.
National Audit Office (2013b) *The Role of Major Contractors in the Delivery of Public Services*, Memorandum for Parliament, HC 810 Session 2013–14, 12 November: 58.
National Center for Policy Analysis (2014) *Air Transportation Privatization*, April 4. Accessed on 9 June, 2014 from: http://www.ncpa.org/sub/dpd/index.php?Article_ID=24280.
Neef, D. (ed.) (1998) *The Economic Impact of Knowledge (Resources for the Knowledge-Based Economy)*, Boston: Butterworth-Heinemann.
Negri, A. (2006) *Goodbye Mr Socialism*, New York: Seven Stories Press.
Nora, S. & A. Minc (1980) *The Computerization of Society: A Report to the President of France*, Cambridge, MA: MIT Press.
Norton, B. & C. Smith (1998) *Understanding the Virtual Organization*, Hauppage, NY: Barrons Educational.
Onforce (2017) *Workforce as a Service*, http://www.onforce.com/features. Accessed 24 April, 2017.
Onrec (2017) '48% of Young People Have Undertaken Unpaid Internships in the UK', July 24. Accessed on December 15, 2018 from http://www.onrec.com/news/statistics-and-trends/48-of-young-people-have-undertaken-unpaid-internships-in-the-uk.
ONS (2018) *Trends in Self-Employment in the UK*, London: Office of National Statistics. Accessed on December 16, 2018 from: https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/trendsinselfemploymentintheuk/2018-02-07.
Ostner, I. (2008) *Family Policies in the Context of Family Change: The Nordic Countries in Comparative Perspective*, VS Verlag für Sozialwissenschaften, Berlin and Heidelberg: Springer.
Pahl, R. (1984) *Divisions of Labour*, Oxford: Basil Blackwell.

Panitch, L. (2004) 'Globalization and the State', L. Panitch, C. Leys, A. Zuege & M. Konings (eds.) *The Globalization Decade*, London: Merlin: 9–43.

Parreñas, R. S. (2001) *Servants of Globalization: Women, Migration and Domestic Work*, Stanford: Stanford University Press.

Percival, N. & D. Hesmondhalgh (2014) 'Unpaid Work in the UK Television and Film Industries: Resistance and Changing Attitudes', *European Journal of Communication*, 29 (2): 188–203.

Perlin, R. (2011) *Intern Nation: How to Earn Nothing and Learn Little in the Brave New Economy*, London: Verso.

Perlin, R. (2012) *Intern Nation: How to Earn Nothing and Learn Little in the Brave New Economy*, London: Verso.

Png, C. (2018) 'COSCO SHIPPING Holdings Gains Market Share and Cost Efficiency in 1Q18', *Crucial Perspective*, May 2. Accessed on August 8, 2018 from: https://crucialperspective.com/cosco-shipping-holdings-1q18-briefing-takeaways/.

Polanyi, K. (1944) *The Great Transformation*, New York: Farrar & Rinehart.

Polanyi, M. (1967) *The Tacit Dimension*, Garden City, NY: Doubleday.

Poulter, S. (2016) 'Return of the Cleaner: One If Three Families Now Pays for Domestic Help', *Daily Mail*, March 31. Accessed on April 15, 2018 from: http://www.dailymail.co.uk/news/article-3516617/One-three-families-pay-cleaner-35s-drive-trend-hiring-domestic-help.html.

Prahalad, C. K. & V. Ramaswamy (2000) 'Co-opting Customer Competence', *Harvard Business Review*, January/February. Accessed on May 9, 2018 from: https://hbr.org/2000/01/co-opting-customer-competence.

Press, M. (1989) 'The People's Movement' in M. Press & U. Huws (eds.) *Solidarity for Survival: The Don Thompson Reader*, Nottingham: Spokesman: 26–47.

Race Relations Act, 1968: An Act to Make Fresh Provision with Respect to Discrimination on Racial Grounds, and to Make Provision with Respect to Relations Between People of Different Racial Origins, 1968, Parliament of the United Kingdom.

Randle, K. & N. Culkin (2009) 'Getting in and Getting on in Hollywood: Freelance Careers in an Uncertain Industry' in A. Mckinlay & C. Smith (eds.) *Creative Labour*, Houndmills: Palgrave Macmillan.

Reed, H. (2011) *The Shrinking State: Why the Rush to Outsource Threatens Our Public Services*, London: A Report for Unite by Landman Economics.

Reich, R. (1991) *The Work of Nations*, New York: Simon & Schuster.

Reid, I. (2008) *The Persistence of the Internal Labour Market in Changing Circumstances: The British Film Production Industry During and After the Closed Shop*, PhD Thesis London School of Economics.

Reuters Staff (2018) 'Amazon Workers Strike in Germany, Joining Action in Spain and Poland', *Reuters Business News*, July 16. Accessed on August 24, 2018 from: https://www.reuters.com/article/us-amazon-com-germany-strike/amazon-workers-strike-in-germany-joining-action-in-spain-and-poland-idUSKBN1K61OY.

Ricardo, D. (1817) *The Principles of Political Economy and Taxation*. Accessed on August 19, 2012 from: http://socserv2.socsci.mcmaster.ca/econ/ugcm/3ll3/ricardo/prin/index.html.

Rifkind, J. (1995) *The End of Work: The Decline of the Global Labor Force and the Dawn of the Post-market Era*, New York: Putnam.

Ritzer, G. & N. Jurgenson (2010) 'Production, Consumption, Prosumption', *Journal of Consumer Culture*, 10 (1): 13–36, following Toffler, A. (1980) *The Third Wave*, Bantam Books.

Rushe, D. (2014) 'Amazon Pulls Warner Bros Movies from Sales as Trade Dispute Expands', *Guardian*, June 11. Accessed on June 12, 2014 from: http://www.theguardian.com/technology/2014/jun/11/amazon-warner-bros-price-hachette-lego-movie.

Sainsbury, D. (1994) *Gendering Welfare States*, London: Sage.

Sayers, S. (2003) 'Creative Activity and Alienation in Hegel and Marx', *Historical Materialism*, 11 (1): 107–128.

Schiller, D. (2000) *Digital Capitalism: Networking the Global Market System*, Cambridge, MA: MIT Press.

Scholz, T. (2011) 'Facebook as Playground and Factory' in D. E. Wittkower (ed.) *Facebook and Philosophy*, Chicago: Open Court: 241–252.

Schumacher, L. (2006) 'Immaterial Fordism: The Paradox of Game Industry Labour', *Work Organisation, Labour and Globalisation*, 1 (1): 144–155.

Simon, J.-P. & M. Bogdanowicz (2013) *The Digital Shift in the Media and Content Industries:* Policy Brief, Seville: European Commission Joint Research Centre Institute for Prospective Technological Studies.

Singh, S., M. Kretschmer & A. A. Gavaldon (2018) *Authors' Earnings: A Survey of British Writers*, London: ALCS: 4. Accessed on September 29, 2018 from: https://wp.alcs.co.uk/app/uploads/2018/06/ALCS-Authors-earnings-2018.pdf.

Smith, A. (1776) *An Inquiry into the Nature and Causes of the Wealth of Nations*. Accessed on August 18, 2012 from: http://www.adamsmith.org/smith/won-b1-intro.htm.

Smith, R. L. (2009) *Premodern Trade in World History*, New York: Routledge.

Srnicek, N. (2017) *Platform Capitalism*, Cambridge: Polity Press.

Standing, G. (2011) *The Precariat: The New Dangerous Class*, London: Bloomsbury.

Statista (2017) *Daily Time Spent on Social Networking by Internet Users Worldwide from 2012 to 2017 (in Minutes)*, September. Accessed on December 15, 2018 from: https://www.statista.com/statistics/433871/daily-social-media-usage-worldwide/.

Statista (2018a) Accessed on October 3, 2018 from: https://www.statista.com/outlook/335/100/crowdfunding/worldwide.

Statista (2018b) *Number of Social Network Users Worldwide from 2010 to 2021 (in Billions)*, July. Accessed on December 15, 2018 from: https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/.

Steinko, A. F. (2006) 'Rethinking Progressive and Conservative Values: Spain's New Economy Workers and Their Values', *Work Organisation, Labour and Globalisation*, 1 (1): 119–129.

Tapscott, D. (1995) *The Digital Economy: Promise and Peril in the Age of Networked Intelligence*, New York: McGraw Hill.

The Economist (2006) 'Artificial Artificial Intelligence', June 8.

The Economist (2015) 'Freelance Workers Available at a Moment's Notice Will Reshape the Nature of Companies and the Structure of Careers', January 3.

Thompson, E. P. (1963) *The Making of the English Working Class*, Harmondsworth: Penguin.

Toffler, A. (1970, *Future Shock*.

Toosi, M. (2002) 'A Century of Change: The U.S. Labor Force, 1950–2050', *Monthly Labor Review*, May.

Touraine, A. (1974) *Post-industrial Society*, London: Wildwood House.

Trading Economics (2018) *United Kingdom Government Spending to GDP.* Accessed on October 1, 2018 from: https://tradingeconomics.com/united-kingdom/government-spending-to-gdp.

Tristan, F. ([1843] 1983). *The Workers Union*. Translated by Beverly Livingston. Chicago: University of Illinois Press: 77–78.

UNCTAD (2004) World Investment Report 2004. The Shift Towards Services, United Nations, New York and Geneva.

Unison (2016) 'Health Service Workers Resort to Loans and Food Banks After Years of Cash Cuts, UNISON Survey Finds', London: Unison. Accessed on December 16, 2018 from: https://www.unison.org.uk/news/press-release/2016/10/health-service-workers-resort-to-loans-and-food-banks-after-years-of-cash-cuts-unison-survey-finds/.

Valkenburg, P. M., J. Peter & A. P. Schouten (2006) 'Friend Networking Sites and Their Relationship to Adolescents' Well-Being and Social Self-Esteem', *CyberPsychology & Behaviour*, 1 (5): 584–590.

Vaquero, L. M., L. Rodero-Merino, J. Caceres & M. Lindner (2008) 'A Break in the Clouds: Towards a Cloud Definition', *ACM SIGCOMM Computer Communication Review*, 39 (1): 50–55.

Vermeulen, N., S. Tamminen & A. Webster (2012) *Bio-Objects: Life in the 21st Century (Theory, Technology and Society)*, London: Routledge.

Von Ahn, L. (2010) *Work and the Internet*. Retrieved on November 25, 2018 from: http://vonahn.blogspot.com/.

Wainwright, H. & D. Elliot (1981) *Lucas Plan: New Trade Unionism in the Making*, Nottingham: Spokesman Books.

Wakso, J. (2003) *How Hollywood Works*, London: Sage.

Wallop, H. (2011) 'Million More People Employ a Cleaner Than a Decade Ago', *The Telegraph*, July 1. Accessed on April 15, 2018 from: https://www.telegraph.co.uk/news/uknews/8608855/Million-more-people-employ-a-cleaner-than-a-decade-ago.html.

Walsh, M. (2001) 'Womanpower: The Transformation of the Labour Force in the UK and the USA Since 1945', *Recent Findings of Research in Economic and Social History*, 30: 1–4, Summer.

Waxman, O. B. (2018) 'How Internships Replaced the Entry-Level Job' *Time*, July 25. Accessed on December 15, 2018 from: http://time.com/5342599/history-of-interns-internships/.

Webster, F. (1995) *Theories of the Information Society*, London: Routledge.

Weinbaum, B. & A. Bridges (1976) 'The Other Side of the Paycheck: Monopoly Capital and the Structure of Consumption', *Monthly Review*, 28 (3): 88–103, July–August.

Wilkinson, F. (1981) *The Dynamics of Labour Market Segregation*, London, New York, Toronto, Sydney, and San Francisco: Academic Press.

Wood, E. M. (1999a) *The Origin of Capitalism*, London and New York: Verso.

Wood, E. M. (1999b) *The Origin of Capitalism: A Longer View*, London: Verso.

Woods, E. M. (1998) 'Labor, Class and State in Global Capitalism' in E. M. Woods, P. Meiksins & M. Yates (eds.) *Rising from the Ashes: Labor in the Age of 'Global Capitalism'*, New York: Monthly Review Press: 3–16: 15.

Wray, R. (2010) 'In Just 25 Years, the Mobile Phone Has Transformed the Way We Communicate', *The Guardian*, January 1. Accessed on May 20, 2018 from: https://www.theguardian.com/business/2010/jan/01/25-years-phones-transform-communication.

Yordanova, G. (2015) Global Digital Workplace as an Opportunity for Bulgarian Women to Achieve Work-Family Balance, Dynamics of Virtual Work Working Paper 5, Hatfield: University of Hertfordshire.

Zientek, H. (2017) 'How Public Sector Workers Are Gifting Their Employers Almost a Quarter of Their Annual Salary', *ExaminerLive*, July 26. Accessed on December 16, 2018 from: https://www.examinerlive.co.uk/news/how-public-sector-workers-gifting-13385294.

Zuboff, S. (2019) *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*, London: Profile Books.