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A 'Post-Work' World:

Geographical Engagements with the Future of Work

Julie MacLeavy and Andrew Lapworth

Abstract

This article reviews geographical research on labour market changes that pose a challenge to 'work' as a compelling category of analysis. Drawing inspiration from feminist scholarship that has sought to develop a frame for thinking about the concept of work so that other activities outside employment are recognised, it critically considers what everyday practices of work, including domestic and reproductive labour, can teach us about the realities and futures of contemporary capitalism. While 'work' has long served as a presumed norm or telos of 'development', this article considers the prospect of the 'end of work' and of a specific type of accompanying capitalist society. It outlines the challenges for policy making in bringing forth a 'post-work' world without cementing social and economic inequality.

Keywords: Automation; Feminism; Feminist Geography; Gender; Post-Work; Work

1. Introduction

In a context where the nature of capitalist production is changing dramatically, the enduring importance of the structure and experience of work is testament to the hold that its imaginary has over society. Economically, the selling of labour power provides a means of gaining access to material necessities such as food, clothing and housing as work is a main focus for the distribution of income (through wages, salary and so

on). Culturally, the sense of maturity and independence connoted by employment illustrates the value placed on work outside the home in both personal and social development. Part-time employment is perceived by many as a rite of passage for adolescents, and the connection between identity and occupation forged from a young age – for example, through the questioning of children as to what they want to be when they grow up. Politically, the priority afforded to jobs and employability within both left and right politics suggests that the socio-economic relationship between a worker and an employer should be a primary concern of contemporary government policy. Traditional right political discourse is enmeshed with the economic imperatives of strategies to improve employability and ‘make work pay’, while the traditional left-wing emphasis on equality and social justice is invoked through an agenda to improve pay and working rights. There is, then, a tacit valorisation of work and employment which persists in spite of some significant labour market shifts.

Given that ‘work’ has served for so long as a presumed norm or telos of ‘development’,¹ this article considers the prospect of the ‘end of work’ and of a specific type of accompanying capitalist society. It reviews geographical research on changes in the organisation of work and workers lives that pose a challenge to ‘work’ as a compelling category of analysis, including automation, the degradation of work and the rise of zero-hour contracts. Drawing inspiration from feminist scholarship that has sought to develop a frame for thinking about the concept of work so that other activities outside employment are recognised, it critically considers what everyday practices of work, including domestic and reproductive labour, can teach us about the realities and futures of contemporary capitalism. In closing, the challenges that confront policy

makers are outlined as the article assesses the role of technology and automation in transforming work and bringing forth a 'post-work' world.

2. The 'Future of Work': Geographical Perspectives

In the decade since the onset of the global financial crisis, there has been a wave of rapid automation touted as the 'fourth industrial revolution'.² Nascent technology breakthroughs in artificial intelligence, robotics, the Internet of Things, autonomous vehicles, 3d printing, nanotechnology, biotechnology, materials science, energy storage and quantum computing are expected to fundamentally transform the way in which we live and work in the future by making visible the limits to the productivist model of work that governs capitalist society. With robots and programmes substituting an ever-greater number of the work activities that humans perform, the construction of work as a social and moral good is projected to become increasingly strained. Automation can occur in many forms and over recent decades technology has tended to increase human exploitation as the machine becomes progressively more central for human resource decisions. In many sectors, management has already begun to quantify labour in ways that extend the forces of individual and internalised neoliberalism that sociologist Nikolas Rose refers to as 'autonomisation' and 'responsibilisation'.³ Surveillance technologies, for instance, are reconstructing the nature, boundaries and governance of work through different forms of electronic performance monitoring, algorithmic management and people analytics that require actors at multiple levels to assume more responsibilities and greater accountability in processes of economic production. A key societal and policy challenge is thus to ensure that these processes lead to better and not worse work, as defined by people's

economic risk, control over their lives at work, and ability to contribute and be listened to in the workplace.

Occurring in the midst of an unprecedented stagnation – or in some industries a decline – in real wages as a result of the global financial crisis and subsequent recession,⁴ automation is associated with the production of ‘precarious workers’ that cluster in particular jobs and sectors of the labour market. Alongside a rapid escalation in the global number of migrants and refugees, automation serves to enable the flexible and efficient organisation of labour in which workers phase in and out of employment in response to prevailing economic conditions. For this reason, the consequences of automation in relation to the temporal aspect of work are frequently noted. Automation is associated with both long and short hours, as well as anti-social hours. Automation is also discussed with particular attention to the growth of underemployment, either by hours worked or skills utilised. In Western nations, automation is further related to the increased incidence of self-employment and zero-hour contracts in which there is an absence of statutory rights and protections. The rise of the ‘self-employed’ online services delivery driver, the Uber taxi cab driver or Deliveroo food delivery biker are evidence of new and different engagements within the ‘sharing’ or ‘on demand’ economy.⁵ Combining demand and supply to disrupt exiting industry structures, gig economy opportunities are now generated through online platforms that seek to harness immaterial labour across geographically disparate communities. Thus, whilst job tenures have risen during the last 15 years, there are very visible markers of insecurity for some groups resulting from the evolution of the labour process within occupations, as well as shifts of labour among

occupations.⁶ For this reason, automation is often cited as a factor in growing levels of socio-economic inequality.⁷

Of course, this isn't the first time that society has experienced the impacts of technological advancement and its attendant hopes and fears. Similar arguments about automation and socio-economic upheaval can be traced from the industrialisation of agriculture, to 19th century discussions of the mechanisation of work during the Industrial Revolution, to the advent of Fordist and post-Fordist systems of production in the 20th century. The difference with these earlier processes of automation is that they tended to impact specific sectors of the economy (e.g. agriculture, motor manufacturing), creating a large pool of reserve labour that could be absorbed into other sectors of the labour market. However, the 'digital turn' we are seeing today involves the automation of highly trained white-collar employment in addition to blue-collar roles. In contrast to earlier periods, technological advancement now affects all sectors of economy as the propensity for work to be performed by machines is primarily dependent on whether or not the tasks performed are routine. Some reports suggest that 80 per cent of jobs are capable of being automated either fully or in part⁸ and it is estimated that more than a fifth of the global labour force – more 800 million workers – could lose their jobs owing to the 'rise of the robots'.⁹ Other analyses highlight that those most vulnerable to these job losses are precisely those individuals who are already the most precariously-placed in our societies, working in low to mid-skill positions which are relatively routine and without substantial creative or decision-making functions.¹⁰

Collective imaginaries of our automated future now abound throughout popular media and political discourse, oscillating between the techno-utopian vision of a global Silicon Valley of clean efficiency and hyper productivity, and a techno-dystopian and *Martix*-esque vision of devastating social and environmental collapse. Within the social and political sciences, scholars have responded to these visions with a renewed focus on labour and workplaces in which a fundamental shift in the relationship of humans to employment is posited. At one level, some scholars engage with the this notion of the future of work as a dystopia, viewing automation as threatening to sweep away whole sectors of employment and intensifying a context of generalised precarity in ‘feminised labour’ (a term which references the changing nature of employment where irregular conditions – once thought to be the hallmark of women’s ‘secondary’ employment – have become widespread for both sexes). However, there is also a burgeoning literature emerging today in which the new forms of work and life emerging through automation are celebrated for their utopian possibilities. One of the most provocative examples of this utopian future thinking is Nick Srnicek and Alex Williams’ *Inventing the Future: Postcapitalism and a World Without Work* in which automation is perceived as an opportunity for a fundamental recasting of Left politics. The development of technologies that replace human labour, in their view, should be promoted and accelerated as a means of liberating humanity from the drudgery of work, whilst simultaneously making society wealthier through increased productivity.¹¹ Rather than be seeing automation as a threat, research in this vein seeks to foster a more open debate about technology and work so the role that innovation must necessarily play in efforts to secure a more socially-just future is acknowledged.

We believe that geographers are well placed to make important and nuanced contributions to these debates around a 'Post-Work' future. Geography has long engaged in research that highlights the uneven outcomes of labour market engagement, and the current research conducted by geographers on the impacts of automation is helping to bring forth a renewed attention to the spatially differentiated impacts of the technological transition we are witnessing today. For example, geographers have argued that contemporary debates around the impacts of automation have mostly been insensitive to their uneven distribution across the globe and have outlined the extent to which the promises and risks outlined in the literature might be specific to countries in the Global North. In particular, geographers have argued the need for more empirically grounded analyses of economies of the Global South where the bulk of the low-skill and low-wage employment opportunities most at risk of automation are concentrated. The rise of youth unemployment in countries like China, for example, estimated by the International Labour Organisation to be 11.1% in 2016, is seen as a sign of the struggle for economies to absorb the new reserves of labour created by technological unemployment.¹² Geographers have also been interested in the emerging global division of labour generated by the transition to automated economies, with the expectation that certain countries in the Global South will continue to fulfil a pivotal role in the production process of these new technologies as well as the sourcing of the raw materials required to build them. In addition, research has also predicted that the rise of the digital economy is likely to further entrench regional inequalities within countries, through the ever-greater concentration of high-skilled work in specific locales and cities with existing expertise in these industries.

Feminist geographical scholars have further argued that, as the economic lives of men and women are unequal, they will be affected by technological change in different ways. Automation will likely exacerbate existing sexual divisions of labour, further concentrating (predominantly middle-class, white) men in high paid roles owing to a growth of engineering, science and technology posts where they are traditionally overrepresented, while women and men from less advantaged social backgrounds remain clustered in the lower end of the labour market where skills such as empathy or manual handling are desired, but not typically well paid. At the same time, feminist scholars have highlighted how discussions of automation in the post-work literature have tended to focus on the workplace with much less attention to its impacts on the sphere of domestic or reproductive work.¹³ Smart technologies – such as Roomba robot vacuum cleaners; digital assistants like Amazon’s Alexa and Apple’s Siri; smart thermostats – have become ‘part of the furniture’ in automated homes of the Global North. Scholars have sought to reveal the continuities and changes in reproductive labour and in what ways, and to what extent, new technologies like those listed above are affecting progress towards more equal and respectful home lives. Helen Hester, for example, has shown how the stereotypical characteristics of femininity are quite literally programmed into these machines – such as the use of female voices in apps like Siri – which reinforces dominant gender assumptions and norms.¹⁴ Deborah Chambers has also shown how advertisements for new domestic technologies have tended to target a dominant technologised masculinity such that women remain marginalised in the automated home.¹⁵ A key focus of feminist research on automation has thus been to question whether we risk a return of women to unpaid care and domestic labour if automation does not prompt a rethink of the total social organisation of labour.

Recognising the analytical implications of making women visible in research enquiries, recent studies of work and employment provoke us to consider what our families and communities will look like if technological advancement cements differences of gender, as well as class, race, sexuality and (dis)ability. By calling into question the centrality afforded to capitalist employment relations and insisting on expanding the concept of labour beyond its waged form, geographical studies highlight the need for governments to support and encourage other activities outside work. Many build upon Kathi Weeks' 'post-work imaginary', which proffers a politics that responds to critical challenges that confront workers in the present moment of crisis and transformation.¹⁶ Weeks does not oppose work per se but seeks to find opportunity in the 'deskilling' and unemployment that some worry will result from digital technologies in the fourth industrial revolution. Automation, in this sense, becomes the basis on which demands are made for a post-work world that would allow people to be productive and creative without being bound to the capitalist employment relation.

Redressing abstracted frameworks of a post-work world, empirical studies of workers inhabiting the intersecting spaces of work and home progress what Weeks terms a 'politics of life against work' that is attuned to what already exists in practice. The ambition is to expose the anti-essentialist quality of the capitalist employment relation and use this as a foundation for challenging the valorisation of work in contemporary society. For example, feminist geographer J-K Gibson-Graham has explored the alternative (non-capitalist) forms of exchange and community emerging in response to dominant discourses of the work society.¹⁷ By mapping the many different ways in which people are surviving in the contemporary period, such research produces

generative knowledge that points towards the possibilities for enacting and fostering alternative economic practices. It allows us to imagine and regulate into existence effective means of ‘taking back the economy’ at local scales.¹⁸

3. Realising a ‘Post Work’ World

The feminist imperative to collectively produce situated knowledge provides a detailed insight into the means to support, reproduce and replicate co-operatives, mutuals and other member-based organisations that reconstitute work as a grassroots response to the precarity within increasingly automated societies. However, the task of connecting local practices of work within ‘community economies’ to a broader international agenda to establish a post-work world remains challenging. How do we nurture politically, socially, and ethically within our communities and networks the affordances of automation when global inequalities of work persist? One iteration of the post-work future posits four ‘demands’ that if fulfilled ought to lead to an inexorable shift in the nature of employment.¹⁹ The first is a fully automated economy in which efficiency gains are used to give workers more free time rather than increase profits through the reduction of jobs and the depreciation of pay for those who remain employed. The second is the reduction of the working week and with it the assumed ethical superiority of work, which sees people engage in ‘bullshit jobs’,²⁰ created for the sake of keeping people in work as paid employment is seen as a moral good. The third is the provision of a universal basic income to remove the economic necessity of work and bolster labour power. The fourth is a devaluation of the work ethic to remove the cultural pressure and incentive to work and the bias against non-work. These individual demands comprise an integrated programme to reconsider what it takes to live a full

and meaningful life in a context where work no longer offers many the opportunity to fulfil their ambitions and dreams.

The literature makes clear the need to think critically about the means of diffusing a post-work agenda including how such demands or policies are advocated for, through what material and institutional changes, and within what arenas or networks. Context is essential to defining the features, goals and social characteristics of economic forms and in this sense a feminist geographical perspective that works within and against the ways things already are can be useful in identifying the concerted – and spatially located – action necessary to remove structural barriers to equality. Technological advancement will not overcome the lower value of feminised labour, the barriers to women's labour market participation or the wealth gap between men and women that will see a greater share of profits flow to men as business owners and investors, without government regulation to erase the disparities that lead to the unequal distribution of the technological risks and opportunities in the first place.

The idea and practice of institutionalising an evolving, but not yet realised, post-work future also open up important questions regarding the politics of a prosperous and democratic society. Feminist research has made visible the differential meanings attached to the post-work imaginary and the potential for empowerment and disempowerment within an economy built around technology and production. Not only are we reminded of the historical struggle of women to become wage labour,²¹ but also the failure of advances in household technology to change the burden or division of domestic labour. With much of the popular debate about automation progressing in ways that might be said to echo how narratives of new forms of technology – the

washing machine, refrigerator, microwave and so forth – were promoted as giving women in particular more ‘leisure’ time in the 1950s and ‘60s, feminist scholars such as Helen Hester suggest a need to be wary of the extent to which ‘post-work’ would necessarily equate to ‘post-capitalist’ or ‘post-patriarchy’.²² In the latest edition of their book, *Inventing the Future*, Srnicek and Williams respond to Hester’s arguments by arguing that a move towards full automation divorced from feminist struggles for gender equality will lead to a ‘misogynist post-work future’ in which there is a decrease in waged labour but women continue to fulfil the majority of unpaid domestic and reproductive work.

Building on this literature, calls for a feminist reclamation of time proffer a very different approach to traditional feminist campaigns to secure women’s freedom and autonomy through work. A focus on time provides for different forms of spatial and political attentiveness and enables an alternative repertoire for securing gender equality. As the basis of a new politics, an attention to time transcends the historic confluence of feminist and neoliberal ideals that has seen efforts to reconfigure the world of work converge with the deregulation of the labour market. As is widely documented, the reduction of barriers to women’s labour market participation and the normalisation of the two-earner family has coincided with the international deregulation of markets and dismantling of employment rights, which has affected all workers through the depression of wage levels, reduction of job security and steep rise in the number of hours worked for wages per household. There is, then, a desire to avoid such an ‘unholy alliance’ with contradictory state agendas and seek to redress how automation can intensify working lives. The nature of contemporary employment keeps workers busy, distracted and tired, but at the same time evacuates the meaning and value that

was once attached to productive employment as employers have little incentive to harness technology to improve job satisfaction and preserve the sense of purpose employment once conferred. Concordantly more could be done to foster alternative roles and identities to overcome the inequalities emergent from the ways in which processes of gender, class, race, sexuality and (dis)ability are embedded in the total social organisation of work.²³

4. Conclusion

The aspiration to recover the 'lost' vision of ending work that once characterised left political thought through the prognosis of a world of 'automated worklessness' needs to be tempered through an explicit focus on the ways people orient themselves differently to work, mediate between and among multi-level technological forces, and are dynamic and mobile among the sometimes seemingly conflictual spheres of production and reproduction. At a moment when technology is creating an 'always on' culture, the post-work imaginary risks being advanced and advocated without fully addressing how the working time/non-working time dichotomy is linked in complex ways to the public/private and production/reproduction divides, as well as the continually relevant social relations which constrain this process. Feminist geography can help us understand how the fourth industrial revolution blurs the boundaries between work and life and thus how people are being constituted as working subjects across a range of different sites.

Grounding policy development in the material, embodied and everyday contexts of employment can also help to ensure that an orientation to the future of work does not result in the de-politicisation and diminishment of small-scale, local and immediate

political struggles that seek to improve the conditions of work in the here and now. While over time gains have been made in terms of addressing gender disparities in pay and promotion prospects, inequalities of work persist and women continue to assume the majority burden for care and domestic labour, increasing time pressures and exacerbating the 'double shift'.²⁴ Feminist geography illuminates the inherently political possibilities that we have to reshape the relations of power in which we live our lives by drawing comparisons across shared features of working lives and tracing of connections between these lives to inform understandings of different outcomes. There is not a singular future of work focused on technology and production, but rather a multitude of futures of work that may emerge. Too often our narratives of automation and futures of work tend to accept as given the likely disemployment of vast swathes of workers as their premise.²⁵ This has the effect of rendering such narratives inevitable and stymies the critical work needed to call them into question. How we create and accept specific 'truths' about the future of work, as geographer Sam Kinsley argues, is political and should be a focus of political action.²⁶ Hence the mobilisation of a post-work world should not be defined as a top-down or bottom-up endeavour but rather something (resistance, solidarity, survival) that is produced as a result of reflexive and open-ended feminist praxis that engages with how this future can be otherwise. Working from and inhabiting such a position of undecidability can invigorate political imaginations, whereas the assumption of a known endpoint of 'Post-Work' World risks depriving people of the agency to shape and resist changes apparent in economic and political life.

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