

Working online, living offline: labour in the Internet Age

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ABSTRACT

This paper begins by tracing changes in employment patterns since the middle of the 20th Century, arguing that the mid 2000s marked the beginning of a fourth distinctive phase, the earlier ones having begun, respectively, after the end of World War II, after the 1973 oil crisis, and after the end of the Cold War, around 1990. In this new phase, dubbed here the 'Internet Age', various tendencies with their origins in earlier periods have reached critical mass. These include a developed international division of labour, in both manufacturing and services and an employment landscape dominated by large transnational corporations able to draw on this global labour pool, using ICTs to manage their increasingly elaborate value chains. Many of these corporations have grown on the basis of the commodification of activities which previously lay outside the scope of profit making, including public services. The paper then discusses how and why online workers are at the front line of many of these developments, before going on to introduce the contents of this volume.

Introduction: the formation of the Internet Age

Any attempt to periodise history is fraught with risk. Focusing attention on a moment of rupture usually involves ignoring the many continuities that remain constant in the background and, since the seeds of each new phenomenon lie in the preceding period, it is rare for the precise moment of its birth to be dateable precisely. Nevertheless, it is hard to deny that there are certain moments when new phenomena reach a critical mass that brings qualitative, as well as quantitative change. Social and economic changes, and the technological innovations with which they are so often intimately entangled, tend to follow a similar path. Rare experiments by pioneers or elites are followed by broader voluntary uptake which is in turn followed by mass adoption leading ultimately to a situation where the usage of whatever it is (school attendance, electricity, the telephone, pre-packaged food) is so taken for granted that social institutions and policies are designed on the basis that they are universal practices.

This issue of *Work Organisation, Labour and Globalisation* takes as its starting point the idea that we are now living in a period, here characterised as the 'Internet Age' in which a series of mutually-reinforcing economic, political and technological

factors have brought about just such a sea-change in the character of work. I do not wish to suggest here that all work has changed. Far from it. My argument is, rather, that a range of features of work that were regarded in previous periods as exceptional or unusual are now taken for granted for a growing proportion of the population and, in the process, expectations of what 'normal' working behaviour should be have also been transformed.

This situation has not, of course, come about overnight. Its origins can be traced back to earlier periods, when the dominant models were different. Oversimplifying considerably (there are, of course, many exceptions and counter-examples), I argue here that there have been three such periods since the end of World War II and that we are now in a fourth.

The first of these, extending approximately from the late 1940s to 1973, saw the creation of what has been variously termed the 'post-war Keynesian welfare state' (e.g. Jessop, 1990), 'the Golden Age of Capitalism' (e.g. Marglin & Schor, 1992), 'Fordism' (e.g. Lipietz & Macey, 1987), or 'Les Trente glorieuses' (Fourastie, 1979). In the developed capitalist economies of the West, and some developing ones, this was a period of national economic plans, often developed within tripartite structures between national governments, employers and trade unions. Although some firms were already multinationals, economies were dominated by national (sometimes nationalised) corporations willing to negotiate compromises at a national or sectoral level. This enabled governments, at least in some national contexts, to use early 20th-century anti-trust laws to exercise some sort of control over corporate behaviour. Many industries were still dependent on sector-specific or company-specific skills, which gave labour a degree of bargaining power in particular industries or regions. Even more importantly, the Cold War created a strong incentive for special deals to be struck with labour. Hovering in the background, in North America, Western Europe and elsewhere, was a real fear that, if concessions were not made to the trade unions, workers would turn to communism. It was during this period that expectations were established, at least for skilled white male workers, that employers should provide continuous, contractually formalised employment, offering regular holidays, sick pay, pensions and prospects of advancement. Even if this was not a universal reality, it was seen as a legitimate aspiration.

The oil crisis of 1973 can be seen as marking the end of this period and the beginning of the next, dating approximately from the mid-1970s to the end of the 1980s. Now, in a context of declining profitability, conflicts between employers and labour were sharpened and employers made increasing use of migrant workers and women (mainly working part-time) to fill lower-paid jobs. Waves of mergers and acquisitions brought an increasing concentration of capital and the multinational companies that resulted began to relocate manufacturing work to lower-wage countries, sometimes to specially-designated Export Processing Zones, where they were often protected from environmental and safety legislation and offered tax advantages. National and regional governments increasingly found themselves forced into competition to attract foreign direct investment, offering subsidies and other inducements to capture such prizes as a major auto plant to their territory.

Meanwhile, the development of information technologies made it possible to simplify and standardise many labour processes, including in service industries, undermining the bargaining power of some traditionally well-organised groups of workers, whilst also opening up new areas of employment for others. Deindustrialisation brought structural unemployment to some regions, but the model of the 'job for life' was still in contention. In the global West, unions remained strong in many regions, with losses in some fields offset by gains in others, particularly in the public sector and in service industries employing large numbers of women and minorities, who were increasingly vocal in pursuit of equality and new rights. Whilst a discourse about 'atypical' employment began to emerge, jobs were, on the whole, still regarded as subject to formal regulation and contractual negotiation.

The symbolic opening of the next phase can be dated to the fall of the Berlin Wall in 1989 but this highly-charged moment coincided with a number of other political, economic and technological developments which, taken together, brought about a scale of change justifying the designation of the next period, running approximately from 1990 to the mid 2000s, as another distinct era in employment relations. It wasn't just that the ending of the Cold War opened up the whole world as a potential field of accumulation for capital (whilst removing the fear that workers would abscond *en masse* to communism). This was buttressed by a general wave of deregulation, opening up free trade in goods and services and enabling unhindered flows of capital, intellectual property and information across national borders throughout the world. Deregulation did not just apply to trade restrictions. Neoliberal regimes went on the offensive against trade unions, reducing employment protection and embarking on a process of privatisation that began to open up the public sector as a new field for profit-making. Meanwhile, the information technologies that had begun to be introduced in the previous period reached critical mass, becoming cheaper and more ubiquitous. The productive potential opened up by digitisation had been limited when its scope was mainly confined to particular computers in particular locations, but this was greatly enhanced when Information Technology (IT) was harnessed to telecommunications (ICT), enabling individual computers to be linked to each other in increasingly seamless ways and their contents exchanged as rapidly as the capacity of the telecommunications infrastructure would allow. In 1992, the International Telecommunications Union (ITU) was formed, initiating an era of rapid deregulation, cheapening and upgrading of telecommunications networks around the world. The same year marked the launch of the World Wide Web, which grew from 50 web servers in January 1993 to over 500 by October of that year (Ragget et al, 1996). 1992 was also the year in which India removed the barriers that had prevented it from exporting software opening up the potential for large-scale remote processing of digitised information.

The stage was thus set for the development of a global division of labour in information-processing work, echoing that which had begun to appear in manufacturing work in the previous period. This did not develop overnight, of course. There were many hiccups along the way. Early adopters of ICT-enabled offshore outsourcing encountered many problems, including those created by technical incompatibilities between different systems, inadequate infrastructure, communication

problems, cultural differences, resistance by workers and managers and the difficulty of standardising complex processes that drew strongly on workers' tacit knowledge¹. Although the teaching of global languages and computer skills were actively pushed by a range of national and international bodies (Huws, 2006) it took time for these to spread. Nevertheless, the 1990s saw a steady growth in offshore outsourcing to developing regions in India and other parts of Asia and Latin America, helped not only by a general growth in delocalisable services, such as call centres, but also by the need for large-scale routine software engineering associated with such activities as the conversion of European currencies to the euro, the explosive expansion of the Internet and the much-hyped 'Millennium Bug'.

Meanwhile, this was a period both of frenetic growth and of economic instability. The 'Asian Tiger' economies rose and crashed in the mid-1990s and at the end of the decade the dotcom bubble ballooned and burst. Nevertheless, deployment of ICTs spread inexorably around the globe and new industries and companies emerged based on their use. These included the 'new breed of multinationals' (UNCTAD, 2004) specialising in the provision of outsourced business services, global telecommunications providers, media conglomerates and the beginnings of the giant corporations that now dominate the Internet.

It was towards the end of this period that working online started to feel like business as normal. Whilst consumers slowly got used to ordering goods online and accessing support via call centres, managers began to be asked by their directors why they had not considered outsourcing as a solution to reducing their costs. More subtly, the idea of work as something unbounded and 'virtual' began to take root. With the increasing use of email (which could be checked from any location) the fixed boundaries between home and work were eroded. And with workers increasingly paid, and managed, by results and requirements for 'flexibility' ever more likely to be written into job descriptions, the hours spent formally working were less likely to be counted. Young people were increasingly expected to undertake unpaid 'work experience' before entering the labour market. Others began to use the Internet for activities which hovered ambiguously between 'work' and 'play'. Almost invisibly, many of the parameters which had defined a 'job' in earlier periods were dissolving away.

This period can be thought of as ending quite abruptly with the global financial crisis of 2007-8. In its aftermath the employment landscape was suddenly very different. The combination of draconian austerity measures with unemployment levels higher than at any time since the Great Depression of the 1930s presented young people with few options but to accept whatever was on offer to them in the labour market. This was a generation which had grown up taking ICTs for granted as an everyday part of life, as familiar with social media, online games and SMS messaging as their grandparents were with pen and paper. And, even if the work they were applying for was manual or face-to-face, they were expected to use ICTs for such things as filling in application forms and communicating with employers. ICTs had, in other words, become part of the taken-for-granted environment of all work. The dissolution of clear boundaries between work and non-work and the erosion of formal rules governing work, whilst

1 Many of these issues have been documented and analysed in past issues of this journal.

still not universal in existing jobs, was becoming ever-more prevalent in those that were newly created, at least in developed Western economies. Whilst this blurriness of boundaries was by no means exclusive to online work, a generation already primed to accept the interpenetration of 'fun', 'education' and the normal business of life online was ill-equipped to dispute such slippages in relation to boundaries between these activities and 'work' in other spheres.

The global economy is kept going by a very large number of activities which are emphatically offline. These include extraction of the earth's raw materials, agriculture, manufacturing, construction, transport, food preparation and serving, cleaning and a range of service activities (from nursing to hairdressing) requiring face-to-face interaction in real time with real people. Whilst these forms of work increasingly involve some component of ICT-enabled labour (for instance for record-keeping or communicating with managers or clients) they could not be classified in any way as online work. Nevertheless, it can be argued that in this new phase which – for lack of a better term – I have designated the 'Internet Age' the normative model of work has shifted decisively.

After the crisis, it was as though the world had woken up to a fundamentally changed reality – one in which a range of trends that had been evident, though not dominant, in the previous period had, almost overnight, become the new normality. The new landscape is dominated by transnational corporations to an unprecedented degree. But these corporations differ in several respects from earlier periods. A glance at the rankings of the world's top companies in 2013 provides evidence of some of these trends. First, the global corporate environment is no longer almost exclusively dominated by the USA, Europe and Japan. Companies based in economies formerly classed as 'developing' play an increasingly important role in shaping the contours of the global economy, and hence global labour markets. No less than 61 of the Fortune 500 countries are now Chinese-based (CNN.com, 2013). The Fortune 500 ranking is based on revenues, which might be regarded as overstating their importance. However even in the FT Ranking, which is based on market value, 23 of the top 500 companies are from China, whilst 12 are from India, ten from Brazil, eight from Russia and five from Mexico (ft.com, 2013). Forbes (2013) ranks three Chinese companies in its global top ten.

Furthermore, many of these companies operate in fields which were formerly seen as national in scope. These 'national fields include formerly nationalised utilities (including telecoms, energy, water and postal services) and public services such as health, education and back-office services supplied to public administration. They also include the mass media, formerly the preserve of national broadcasting companies, nationally- or regionally-based newspapers and small or medium-sized publishing companies. All of these fields, and many others, including retail chains, are now dominated by huge conglomerates. The FT's top 500 companies include 17 global mobile telephone companies and 15 fixed line ones, 15 giant media companies, 15 software and computing companies and 11 health care companies, all global in scope (ft.com, 2013). Companies providing outsourced services or labour-only subcontracting have also made it into the top rankings. Accenture is number 385 in the Fortune 500 list and Addeco is number 443 (CNN.com, 2013).

Young people entering the labour market are not only much more likely to find themselves working for one of these global behemoths; they also do so in direct competition with similarly qualified workers from across the globe. They have, in effect, been reconstituted as part of a global reserve army of labour, a pool that can be accessed by footloose employers in two quite distinct ways: offshoring or migration². The bargaining power of these workers vis a vis these employers is thereby dramatically reduced in comparison to their predecessors in earlier periods, and their lives, both as workers and as consumers, are increasingly shaped by these corporations, often in ways that the local state has little power to intervene in.

This volume does not attempt to analyse the totality of labour in this new era. Its goal is more modest: to focus particularly on labour that takes place wholly or partially online in this new global context. Whilst recognising that such work does not constitute the majority of all labour, online work has been singled out for special attention for four reasons: first, because it is growing exponentially in scale; second, because – through its critical role in extending and managing global value chains across a range of sectors – it gives us insights into more general processes of restructuring; third, because it illustrates in a particularly acute form many of the trends affecting employment more generally, including the blurring of boundaries between work and non-work activities³; and fourth, because the topic of ‘digital labour’ or ‘virtual work’ has been the subject of extensive discussion and debate in the academic literature. Before introducing the contents of this volume, I will briefly summarise some of this literature.

Academic debates on online work

The topic of online work sits at the intersection of a wide range of different academic disciplines and fields of interest, each of which has addressed it from a different perspective, often using different terminology. Since the 1980s, sociologists, psychologists and business analysts have studied ‘teleworking’, ‘eWork’ or ‘networking’; students of media and communications studies have looked at ‘digital labour’ or ‘creative labour’, economic geographers have examined the delocalisation of work and new patterns of agglomeration and clustering, organisational theorists have analysed the role of ICT-enabled offshore outsourcing and policy-makers have fretted about the employment implications of the development of a ‘knowledge-based’, ‘information’ or ‘networked’ economy⁴. More recently, attention has been drawn to new forms of ‘virtual’ or ‘digital’ labour, such as ‘crowdsourcing’ using online platforms such as oDesk or eLance (Caraway, 2010) or Amazon’s Mechanical Turk (Kittur et al, 2013).

2 The complex inter-relationship between offshoring and migration was explored in Volume 6 no 2 of *Work Organisation, Labour and Globalisation*, entitled, *Bridges and Barriers: globalisation and the mobility of work and workers*, available online at <http://analytica.metapress.com/content/j821245873x1/?p=0cc035504d50467cb90956c6d4312605&pi=0>.

3 In a 2012 survey of nearly 10,000 information workers, for instance, by Forrester, it was found that most ‘global information workers’ used a combination of several different work and personal devices for work, with 14% using six or more separate devices and only 26% using just one. over half (52%) used three or more devices for work and 60% of devices were used for both work and personal purposes. In many cases (e.g. 57% of smartphones) workers had paid for the devices themselves (Perez, 2012).

4 Much of this literature is summarised in the Memorandum of Understanding of COST Action IS 1202, *The Dynamics of Virtual Work*, which can be accessed online at: http://w3.cost.eu/fileadmin/domain_files/ISCH/Action_IS1202/mou/IS1202-e.pdf.

Across these many fields, a large body of empirical research has been accumulated, too broad to summarise here, which has contributed to new understandings of the overlapping phenomena investigated but also generated a number of new questions. Like the research which has informed them, these questions have also come from a number of different disciplinary and ideological perspectives, including political economy, feminist theory, economic geography and sociology. Some have challenged the most basic concepts that have been used in the analysis of labour in the past. In a large, and growing, body of literature (see for example Terranova, 2000; Hardt & Negri, 2004; Fuchs, 2008; 2009; 2012; Andrejevic, 2009; Arvidsson & Colleoni, 2012; Ross, 2012) it has been debated, for instance, whether the Marxist labour theory of value still applies to work carried out on the Internet and whether the relationship of labour to capital can any longer be modelled using traditional concepts of value creation at the point of production. It has also been asked whether distinctions can continue to be drawn between production and consumption, whose putative merger is encapsulated in terms such as 'playbour' (Kücklich, 2005) 'prosumption' (Toffler, 1980; Tapscott, 1995; Ritzer & Jurgenson, 2010; Comor, 2010), and 'co-creation' (Prahalad and Ramaswamy, 2000; Banks & Humphreys, 2008), and whether it is in fact Internet users whose unpaid labour produces the value that is harvested by companies such as Google and Facebook. In short, doubt has been cast on the continuing relevance of many of the fundamental building blocks of traditional social and political-economic theory, as well as on how we should interpret the large bodies of research that have taken place over the last half-century on labour, within the broader social science disciplines and within the smaller schools that populate these (such as the networks that have grown up around such fields as socio-technical systems, labour process theory, gender and technology and global value chain analysis). There is thus an urgent need for the development of some conceptual clarity in relation to 'virtual', 'digital' or 'online' work, a process to which we hope this volume will contribute.

The contents of this volume

This volume opens with a paper by Sabine Pfeiffer who addresses the vexed question of how value is generated online. Drawing attention to the complex interactions between online and offline economic activities, she demonstrates that the size of the Internet economy has been exaggerated in several accounts, although there remains considerable uncertainty about how it should be measured and, in particular, how value should be defined on the web. Into this murky picture she introduces some light by drawing clear distinctions between value creation and value realisation on the one hand, and, on the other, the form that value takes (whether what is produced is a commodity, with monetary value, or commons, with a societal use value). Crossing these variables enables the creation of a three-dimensional conceptual matrix with considerable power to analyse contemporary processes of value creation. In applying it, she demonstrates that, although it is often obscured by the complex organisation of value chains, labour is still the ultimate source of value in the Internet Age.

The second paper in this collection also addresses an area of considerable confusion in the literature: how to define, and classify, virtual work. In 'towards a taxonomy of

virtual work,² Kaire Holts summarises some of the many areas of ambiguity that pervade the field and looks for commonalities and differences that might make it possible to develop a taxonomy. Cutting her way through a thicket of conflicting opinion, she takes three of the most problematic forms of virtual work currently discussed and assesses them one by one, identifying their similarities with, and differences from, related offline equivalents and analysing how value is created in each case. The three types of activities she takes as examples are: first, online platforms used by virtual communities (such as social media) in which the activities of users are sometimes regarded as unpaid labour producing value; second, work-like activities in or around computer games (including the generation of income from ‘gold farming’ and online gambling); and third, ‘click’ work and other forms of ‘crowdsourcing’. She concludes that the development of a clear classification of virtual work is currently hampered by a lack of theoretical clarity about how value is generated online and a lack of empirical research on these and other forms of virtual work.

In the next paper, Simone Wolff and Sergio Antunes de Almeida shine a spotlight on a new form of online labour in the process of formation: the teaching labour involved in distance education. In this case study of the introduction of distance learning in Brazil, they show how the employer used a combination of Toyotist and Taylorist management methods, firstly to extract the teachers’ tacit knowledge, record it and embed it in standardised online course materials and secondly, once it had been incorporated, to replace the first generation of ‘creative’ professors with lower-skilled and lower-paid substitutes whose task it was to deliver these now-standardised courses in a process which is analogous to the proletarianisation of manufacturing workers in earlier period. They show how this process of commodification has not just introduced new forms of alienation into teaching work, but also appears to be associated with reductions in learning quality.

The next paper looks at virtual work in the context of co-operation between different units across value chains in the IT sector. Annika Schönauer, Ruth Kasper, Jörg Flecker and Ursula Holtgrewe analyse three case studies of small software companies in Austria, each of which, for different reasons, is involved in virtual co-operation internationally, in one case with a supplier company in Serbia, in another with a customer company in Germany and in the third with a variety of internationally-based freelance workers. Their analysis does not just shed light on the daily realities of this increasingly prevalent form of working, it also points to some of the limits of virtuality (for instance the failure to establish constructive virtual co-operation in the stages of project development where outcomes could not be clearly specified) and shows how value chains and networks are shaped by power relations and dependencies. Virtual work, in other words, should not be seen as an abstract set of relations apart from the ‘real world’ but as something that is firmly embedded within it.

Marie-Josée Legault, in the next contribution, presents research carried out in Quebec in two industries that are often regarded as paradigmatic examples of virtual work: software development and video game production. Her starting point is the often-noted long hours culture that prevails in these industries, where unpaid overtime working is an expected part of working life. Her extensive empirical research among

workers in these two industries leads her to reject conventional explanations for this (such as, that the work is considered so cool, and so much fun that workers voluntarily sacrifice their private life to it; or, alternatively, that their earnings are attractive enough to provide compensation for it; or even that they dare not say no because their skills or so scarce). On the contrary, she argues that there are solid structural reasons for this deregulation of working time which can be traced back to the particular form of work that dominates these industries: project-based working. In combination with the high risk involved in developing new video games or software packages, this form of work creates a particular set of circumstances that are highly conducive to this development. In a context of strong global competition and a rather low chance that any given product will be successful on the market, games and software companies are tightly managed by their clients, who transfer a considerable amount of risk to them. Given that the vast majority of their costs are labour costs, and given the high degree of uncertainty involved in accurately assessing the workload involved in producing these products, most of this risk gets transferred directly to the workers. The workers, in turn, are employed on a project-by-project, so are in a more or less continuous process of having to position themselves to be picked for the next project whilst working on the current one. They cannot afford to get a reputation for being difficult, and therefore have to show themselves as co-operative, which entails putting in whatever hours are necessary to meet demanding deadlines. In Legault's view, this explains the very high rates of drop-out from these industries by women with childcare commitments. The spread of project-based working to many other industries, particularly those involved in 'creative' work, suggests her findings have broad applicability in other sectors.

Frederick Pitts, too, looks at the long hours worked by virtual workers in project-based teams, in his study of 'flexible time and flexible subjectivity in the digital workplace'. His case study focuses on a digital new media company in Britain's 'Silicon Gorge' (an area near Bristol with a concentration of such companies). He argues that the culture of flexibility that prevails in this company has the effect of harnessing the subjectivities of employees to a cycle of 'project time' centred around specific tasks and deadlines – and divorced from actual 'clock time'. He breaks this down into a number of components, including 'connectivity', 'flexible subjectivity' and 'multitasking', providing a qualitative insight into the ways in which virtual working erodes the fixed spatial and temporal boundaries of traditional models of work.

The next paper, by Fábio Francisco de Araujo and Patrícia Amélia Tomei, illuminates another aspect of the new employment models: the changes they bring about in values, ethics, mutual commitment between employers and workers and the meanings assigned to work. They do this using a method that is relatively rare in the sociology of work: the detailed analysis of a film, in this case, the 2005 film *Le Couperet (The Axe)* directed by Constantin Costa-Gavras. In applying different philosophical principles of ethics to a detailed analysis of the plot, they highlight some of the film's key messages, messages which, they argue, are emblematic of workers' actual experiences in the current labour market. In the film, the protagonist moves from an employment position typical of capitalism's 'Golden Age', in which mutual loyalty between employer and employee are rewarded and collegial bonds exist between

co-workers, to one typical of the current era, in which corporate decisions are driven by global competition, which is reflected in intense (indeed murderous) competition between workers and the replacement of collective values by individual ones, and of principles of justice by self-interest.

The final paper in this collection, by Johan Söderberg, revisits arguments about deskilling first developed by Harry Braverman (1974) and applies them to the new context of unpaid labour carried out by hobbyists in the 3D printing community. He concludes that the labour process theories developed during the 1970s are still relevant, and will remain so whilst capitalist relations of production exist. However an examination of skill simplification within a non-waged social context is useful in that it allows us to begin to imagine alternative forms of automation, under a different social system. These conclusions are relevant for broader discussions about unpaid online labour, opening up for critical discussion some of the ambiguities that are present in such concepts as 'free labour' (Terranova, 2000).

The volume also includes two review articles, one, by Eran Fisher, reviewing *Digital Disconnect: How Capitalism is Turning the Internet Away from Democracy* by Robert W. McChesney and the other, by Bryan Evans, reviewing several recent publications on the commodification of public services and the impacts on labour.

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