Academic Labour, Digital Media and Capitalism

Thomas Allmer
University of Stirling, UK

Abstract

The aim of this article is to contextualise universities historically within capitalism and to analyse academic labour and the deployment of digital media theoretically and critically. It argues that the post-war expansion of the university can be considered as medium and outcome of informational capitalism and as a dialectical development of social achievement and advanced commodification. The article strives to identify the class position of academic workers, introduces the distinction between academic work and labour, discusses the connection between academic, information and cultural work, and suggests a broad definition of university labour. It presents a model of working conditions that helps to systematically analyse the academic labour process and to provide an overview of working conditions at universities. The article furthermore argues for the need to consider the development of education technologies as a dialectics of continuity and discontinuity, discusses the changing nature of the forces and relations of production, and the impact on the working conditions of academics in the digital university. Based on Erik Olin Wright's inclusive approach of social transformation, the article concludes with the need to bring together anarchist, social democratic and revolutionary strategies for establishing a socialist university in a commons-based information society.

Keywords

academic labour, digital university, knowledge workers, working conditions, digital labour, struggles

Introduction

Modern universities have always been part of and embedded into capitalism in political, economic and cultural terms. In 1971, at the culmination of the Vietnam War, the Chomsky-Foucault debate reminded us of this fact when a student pointed a question towards Chomsky: 'How can you, with your very courageous attitude towards the war in Vietnam, survive in an institution like MIT, which is known here as one of the great war contractors and intellectual makers of this war?'

Corresponding author:
Thomas Allmer, University of Stirling, Faculty of Arts and Humanities, Division of Communications, Media & Culture, Pathfoot Building, Stirling, FK9 4LA, Scotland, UK.
Email: thomas.allmer@stir.ac.uk

(Chomsky and Foucault, 2006: 63). Chomsky responded dialectically, but also had to admit that the academic institution he is working for is a major organisation of war research and thereby strengthens the political contradictions and inequalities in capitalist societies.

Edward P. Thompson (1970), one of the central figures in the early years of British cultural studies, edited the book *Warwick University Ltd* in the 1970s. Thompson was working at the University of Warwick then and published together with colleagues and students a manuscript that discovered, as the title suggests, the close relationship of their university with industry and industrial capitalism. The book also revealed some evidence of secret political surveillance of staff and students by the university uncovered by students occupying the Registry at Warwick at that time.

The renowned Marxist geographer and one of the most cited authors in the humanities and social sciences, David Harvey was recently asked in an interview about managerialism and the pressure to raise external funding at his university, City University of New York: 'I had a dean saying to me that I wasn't bringing in any money. You're worthless, he said, as far as we're concerned. So I asked what I was supposed to do. Was I supposed to set up an Institute of Marxist Studies funded by General Motors? And the dean said, "Yes, that's a good idea. I'll support you if you can do that"' (Taylor, 2010).

Situated in this economic and political context, the overall task of this article is to make a critical contribution examining universities, academic labour, digital media and capitalism.

Universities are often seen as intellectual spaces and communities of scholars, rather than workplaces. At least historically, university lecturers and professors have been considered as being engaged in a higher vocation, similar to writing poetry (Harvie, 2006: 9). The activities of academics have been understood as a high mission, rather than labour, and academics as citizens, rather than workers. This argument is often used to dismiss the political concerns of academic workers (Gulli, 2009: 15).

Academic labour studies is an interdisciplinary field in the intersection of subject areas such as education, management, policy studies, cultural studies and sociology. The field is constantly growing, reflected in an expanding literature reporting about the changes in the working conditions of academics. One of the aims of academic labour studies is to bring down university work from its high mission.

However, Winn (2015: 4, 10) argues that the academic labour studies literature tends to be essayistic in style, hardly engaging on a theoretical level, but criticising neoliberal developments, romanticising the 'golden age' of universities and wanting to restore Fordist configurations. This article strives to move beyond this critique by focusing on a critical social theory approach, contextualising universities historically within capitalism and analysing academic labour theoretically.

While teaching and research at universities becomes more virtual and digital (e.g. online research and digital methods, virtual learning environments, Massive Open Online Courses), several authors (Noble, 1998; Gregg, 2013; Lupton, 2014; Poritz and Rees, 2017) have suggested that the deployment of digital media has an impact on the working conditions of academics; to name but a few, the blurring of working space and other spaces of human life, always on cultures, and digital surveillance.

Therefore, this article focuses on the following issues by moving from the abstract to the concrete level:

- *Historical context*: universities and academic labour
- *Academic labour*: theoretical analysis of forms, concepts and conditions
- *Digital media*: impacts on universities and academic labour

I address these points based on a critical social theory approach. In doing so, I engage with the history and context of universities in the next section. Section three deals with the forms and concepts of academic labour and provides a systematic analysis of working conditions at higher education institutions. The impact of new information and communication technologies on academic labour is outlined in section four. The article concludes with a summary and discusses political potentials and alternatives. While occasional references are made to other areas such as the US and Continental Europe, this article mainly focuses on the UK.

History and Contextualisation of Universities and Academic Labour

Older universities such as the ones in Oxford and Cambridge had been founded before the modern British state was created. Considered historically, British universities have been understood as communities of scholars pursuing knowledge and advancing learning. The medieval idea was that academics should organise themselves, where collegiality plays an important role (Callinicos, 2006: 21). This idea is still reflected in their current legal form and so most of them are today independent corporate institutions with charitable status. British universities are not state organisations as they are in many other European countries such as Germany and Italy. Nor can their employees be considered as civil servants. Since UK universities were legally never state organisations, but rather independent, care must be taken in using the term 'privatisation', although the UK government has recently implemented new legislations that provides universities the freedom to change their corporate form in order to better access private investment (McGettigan, 2013: 128). Outsourcing several tasks and creating joint ventures with the private sector are further strategies of universities to undermine their charity status (for further information on this, see McGettigan, 2013: 128).

The higher education landscape has changed in the last decades. One of the most obvious changes is expansion in terms of providers, student population and university staff in absolute numbers. One of the crucial questions is of course how to assess the expansion of the universities. According to Callinicos (2006: 5), there are two main competing ways of interpretation:

> 1. One way might be to criticise those developments on the argument that an expansion of the university necessarily brings down the quality of higher education. The expansion leads to quantity instead of quality, worsened staff-student ratio and a devaluation of the university degree in general. This line of argument is often accompanied with the idea that universities should remain a privilege of a minority being educated at elite universities. This position considers the expansion of universities as a negative development and is traditionally linked to conservative politics.

Indeed, the staff-student ratio has decreased (Higher Education Statistics Agency, 2016) and the workload and time pressure for academic staff have increased (University and College Union, 2016b: 18–19) in the last decades that might also have a harmful effect on the quality of research and teaching at universities in the UK. But the question remains if these developments are necessarily an outcome of the expansion of universities or rather its political and economic conditions. One could imagine expanding higher education with the provision of the necessary resources and thereby promoting real social inclusion. The critique on the vanishing quality of higher education entails some true elements, but it remains fragile in the analysis of the causes and the suggested solutions. Romanticising the past, arguing for higher education as a privilege for the few and defending elite universities remains a deeply conservative and reactionary ideology.

2.   Another position might be that the expansion of the university widens access for people from poorer backgrounds, women and ethnic minorities and thereby provides inclusion, equality of opportunities and social justice. Education is considered as a route out of poverty and disadvantage and to build a more socially just society. Traditionally linked to labour politics, the expansion of the university is rather considered as a positive development.

The expansion of the university and the widening of its access for students and academics from poorer backgrounds, for women and for ethnic minorities can be considered as an important achievement and social advancement of the last century and was partly the outcome of class struggles, women's movements and civil rights movements (Dyer-Witheford, 2005: 80). In addition, the expansion of higher education also led to a broader politicisation across social strata and resulted in student movements at several advanced industrialised societies such as Germany and France in the late 1960s. These developments can be considered as being on the subjective level, because human actors, agencies and social groups stood up, raised their voice and fought in order to change university structures and society to the better. It is the impact of humans on society.

Capitalism has changed from a Fordist to a post-Fordist accumulation regime and from a Keynesian to a neoliberal mode of regulation (Jessop, 2002). Even more than Fordism, informational capitalism requires and rests on trained and skilled workers such as managers, technocrats and scientists being able to plan, manage and operate the sophisticated production process. The expanded university provides such a workforce by being an ideal place for employability and to train workers for the post-Fordist market (Dyer-Witheford, 2005: 71). The neoliberal university provides the workforce for corporations at no costs as higher education is funded by the state and/or paid individually through tuition fees. Capital thereby expropriates the commons.

Besides the tight subordination of teaching to economic needs, research has been changing in the post-Fordist area as well. Much more research is necessary since products have become more complex. While bigger companies tended to have their own research laboratories, the post-Fordist accumulation regime requires research at a scale that urges companies to outsource research to universities in order to reduce costs (Callinicos, 2006: 13). New joint ventures between universities and the private sector have emerged to the logic of international competition and profit. The costs and risks of research have thereby been socialised, while the benefits of innovation privatised (Dyer-Witheford, 2005: 76). Because of the changing nature of both teaching and research in the neoliberal era, Dyer-Witheford (2005: 76) claims that 'capital becomes more intellectual; universities become more industrial'. Academic research has become crucial for post-Fordist accumulation (Dyer-Witheford, 2011: 279).

In summary, the post-war expansion of the university can be considered as medium and outcome of informational capitalism. While research laboratories contribute to bring forward information technologies and techno-scientific innovations that help to develop a knowledge-based economy (medium), informational capitalism requires a highly trained and skilled workforce being provided by the neoliberal university (outcome).

As argued above, the widened access of universities is the historical success of social struggles by humans on a subjective level. Simultaneously, capitalism rests on the expansion of universities as it requires advanced research and a high skilled workforce under neoliberal and post-Fordist conditions. These developments can be considered as objective in contrast, because social structures enable and constrain individual actions. In order to answer the question of whether the expansion of the university can be considered as a positive development that promotes social justice, one has to take into account not only the subjective, but also the objective level and the neoliberal and post-Fordist context. In principal, capital does not pay attention to the social background of people, as long as they conduct valuable research and can be exploited as a trained and skilled workforce

(Dyer-Witheford, 2005: 80). The expansion of the university is neither positive, nor negative, but a contradictory development by widening access for both subordinate groups and capital's interests. In analogy to Horkheimer and Adorno's (1969) understanding of the enlightenment as a dialectic process of progress and regress, liberty and barbarism, the university expansion can also be understood as a dialectic development of progress and regress, social achievement and advanced commodification.

Because the two main competing ways of interpreting the expansion of the university are flawed, a third option is introduced here:

3. Terranova argues that 'the debate seems to be stuck in the false opposition between the static, sheltered ivory tower and the dynamic, democratic market' (Terranova and Bousquet, 2004). As a result, we need a socialist expansion of the university that provides the necessary material resources in order to ensure teaching and research at a high quality on the one hand and a political and economic context in order to widen access to education in general and higher education in particular for all social groups without interferences of capital's interests of cheap labour power and industrial research on the other. The struggle for better universities can thus not be separated from the struggles against capitalism (Callinicos, 2006: 7).

Academic Labour

In the following, I deal with the forms and concepts of academic labour, before a systematic analysis of the working conditions at universities is provided.

Forms and Concepts of Academic Labour

The discussion about academic labour brings up the question of whether academic workers are part of the proletariat, create value and are exploited in capitalist societies. These questions are important theoretical ones in order to be able to situate academics in a class concept appropriately. Identifying the class position of academic workers is important for political reasons: to create relationships and solidarities and to understand class struggles.

In the introduction to the English version of *Capital: Volume Two*, Mandel (1992: 47) argues that Marx used a broad concept of the proletariat that includes all workers who have to sell their labour power. If we accept such a broad understanding and reject the narrow definition of the proletariat as constituted only of productive workers, academics can be considered as part of the proletariat, independently if they create value and are productive or unproductive labourers.

In order to answer the questions of value creation and exploitation of academics, it makes sense to have a look at how state theorists analyse the role of public organisations and civil service employees in general. In reference to Yaffe and Offe, Wright (1978: 155–156) argues that most state expenditure does not directly produce surplus value. State employees 'have a different relationship to private profits and public taxation than employees of capitalist firms' (Wright, 1997: 462). If we follow this line of reasoning, one can say that in comparison to workers in other sectors such as engineers in a private company, academics are normally not employed and therefore not directly exploited by capitalists. Many academics are employed by the state or a charity not producing profit and thus cannot be regarded as capitalist enterprises. At universities, there is no such relationship between workers on the one hand and an owner of productive forces (i.e. capitalist) on the other. Operations such as investing in the stock market, creating joint ventures with the private sector, outsourcing several tasks, minimizing democratic structures, implementing new

management methods, etc., give an impression of higher education institutions as very similar to private companies; but the main difference is that universities are owned by the public and not individuals. The property relations between private companies and universities differ.

Marx describes land and nature as the objects of labour, but one can argue that information and knowledge might also serve as objects of labour in the mode of production. Marx himself draws this possibility in the 'Grundrisse'. The technological development of the productive forces causes a rising importance of science, information and general social knowledge in the capitalist process of production. Knowledge becomes a direct force of production.

It can be stated that capitalism has now reached a stage that Marx only claimed as possibility, a knowledge-based economy depending on the brains and social intellect of human beings (Dyer-Witheford, 2005: 73). The brain has become an important productive force in informational capitalism (Fuchs, 2008: 200). The last decades of capitalist production have been characterised by an intensification and extension of informational commodities being based on knowledge, ideas, communication, relationships, emotional artefacts, cultural content, etc. That is to say, labour is not only based on information, but information and communication are now direct forms of labour. Different types of work include agricultural, industrial and informational labour (Fuchs and Sevignani, 2013: 257). Part of this information and knowledge is created and shared by academics at higher education institutions. Universities thus play an important role in the knowledge-based economy.

Autonomist Marxism has raised the concept of the 'common'. The germ form (*Keimform*) of capitalism is the commodity and the germ form of communism is the common (Dyer-Witheford, 2007: 81). A commodity is a good produced for exchange and a common is a good produced by collectivities to be shared with all. The common is the dialectical sublation of private property and public goods.

One can argue that knowledge and skills that are created and shared at universities are part of the commons. Academic knowledge creation can be considered as a social process. Academics create knowledge that is based on preceding knowledge of society, share these outcomes with society so that further knowledge can be created in society, and so on. Academic knowledge creation is the result of a common social process and an infinite social cycle. Students are also involved in producing the knowledge commons, since teaching is not a one-way process. The interaction between lecturer and students can be considered as production and reproduction of educational knowledge. Informational capitalism rests on the knowledge commons that are partly created at universities. On the one hand, capital needs the knowledge as outcome of academic research for pushing innovation forward, on the other hand, capital requires a highly skilled workforce that has been trained in higher education institutions.

Because universities are primarily funded by the state and through tuition fees, capital receives the knowledge commons at no costs. Capital appropriates the commons and thereby exploits the results of the societal production process at universities. Capital exploits the commons and society. The implementation of patents and intellectual property rights are attempts to transform scientific knowledge and academic commons into private properties. Although academic workers and students are not under direct command of capital, they are part of the knowledge workforce producing the commons that are consumed by capital. Academic labour is thus indirectly producing surplus value and exploited by capital. Academic workers and students can be considered as part of what Hardt and Negri (2004) call the 'multitude'. The multitude is an expanded class concept going beyond manual wage labour and taking into account that labour is increasingly based on the commons.

Fuchs and Sevignani (2013: 239–249) remind us of the importance of making a semantic differentiation between work and labour in the English language. Work is a creative and productive

activity that produces use values in order to satisfy human needs. Work is a general and anthropological concept common to all societies. Labour, in contrast, is a concrete form of work that produces value. Labour is a historic form of the organisation of work in class societies. It is a specific historical characteristic of work embedded into class relations. Work is essential and takes place in all societies, labour only takes place in capitalism. Because universities are part of capitalism and academics are embedded into class relations, it thus makes sense to speak about academic labour, instead of academic work (Winn, 2015: 1). Academic labour is a specific historical form of academic work.

According to Giddens (1981: 64) and Bourdieu (1977: 4), social phenomena are characterised by a mutual relationship of social structures and social actors. Social structures can be understood as institutionalised relationships that enable and constrain the individual. Social actors can be understood as human individuals that act within and might react on social structures. Social phenomena consist of social structures enabling and constraining social actors that react upon social structures. Academic work is also characterised by a mutual relationship of social structures and social actors; or speaking more specifically, of form and content. The social structure and form of academic work can be understood as the political, economic and cultural context of universities. This includes political power relations, the economic structure and cultural hegemony of academic labour and to see universities as institutions within capitalism. These structures do have an enabling and constraining effect on academics. Structures enable academics in the sense that they make possible work in the first place. For example, universities provide employment contracts and material resources and thereby making possible academic work conducted by individuals. But contracts and resources are limited in many ways and thus also constrain individuals and academic work. The social actors can be understood as human individuals conducting academic work resulting in academic content. This includes the academic as subject creating a certain outcome of academic knowledge, skills and practices, the analysis and assurance of the quality and values of this outcome and the pedagogical impact. Social actors might react on social structures within universities. Social structures are the historical outcome of struggles and thus changeable to a certain extent. For example, salary bargaining, reduced workloads, additional resources, new staff, etc., are possible reactions of academics to the social structure within universities. These new social structures again have an effect on individuals. Academic work is thus a permanent process of social structures enabling and constraining individuals that react upon social structures.

Yet, Winn (2015: 1–2) argues that there is a tendency within the existing literature to focus on the content of academic practice, values of as well as teaching and assessment in higher education, concerns about identity, and what it subjectively means to be an academic. Such a focus is one-sided, undialectical, leaves out the political economy of higher education and critical engagement of capitalism. Bringing back the relationship between the political-economic context and the academic as worker within academic labour studies is the focus of this article. The distinction between form and content of academic labour is related to the distinction between relations and forces of production. Both the content of academic work and productive forces consider the particular production process, and the form of academic work and relations of production take into account the social context of this process. Talking about the content and omitting the form of academic work is similarly as problematic as talking about specific forms of the organisation of the productive forces, cumulated in terms such as 'information society' or 'network society', and omitting questions of the relations of production with regard to ownership, power and division of labour.

As outlined in the previous section, although the university as a place of academic knowledge creation has a long tradition, its development from an intellectual circle of elites to a broader institution of higher education can be considered as medium and outcome of informational capitalism. The realm of academia is a specific subsystem of the information and knowledge sector. Academic

work is a specific form of information work that has to do with the production and distribution (reproduction) of academic knowledge, skills and practices. Because culture entails information work creating content and communication, academics can be considered as cultural workers (Gill, 2014). Academic work is part of informational work that is part of cultural work. 'Artistic and academic traditions extol sacrificial concepts of mental or cultural labour that are increasingly vital to newly important sectors of the knowledge industries' (Ross, 2000: 2). The strong relationship between universities and neoliberalism indicates how the spheres of culture and economy are interrelated.

Academic work is linked to other forms of work such as clerical, technical and manual work. Many different forms of work are directly and indirectly involved in the creation and sharing of information and knowledge at universities beyond the academic activities of scholars. Think for example of the secretary who organises the administration behind teaching, the librarian who arranges books and journals, the IT technologist who maintains the websites and servers at universities, the manual worker who services the equipment in classrooms, the cleaner and janitor who keep the university building running, etc. Academic activities would hardly be possible without all of these different forms of labour at universities. This just indicates that work tends to be a social process where many individuals are involved and what Marx termed 'Gesamtarbeiter' (collective worker). Marx (1976: 643–644) argues that work tends to be a combination of workers, a combined labour force, resulting in a combined product. If we take a look at the higher education landscape in Scotland, one can see how much other forms of work are involved beyond academic work at universities. 19,250 academics, 10,515 academic atypical staff and 23,650 non-academic staff worked at Scottish universities in 2014/2015 (Higher Education Statistics Agency, 2016). That means 44.3% are non-academic workers such as administrators, technologists, manual workers, etc., at universities. If we talk about university labour, one should not oversee this form of work and workforce that comprises almost half of the workers in absolute numbers at least in the Scottish context. To be precise, one could make the distinction between academic work of research and teaching and non-academic work of administration and technological assistance at universities. However, these tasks are overlapping to a certain extent; for example, academic workers also have to conduct administrative tasks such as keeping registers of their student cohort. Similar to a broad definition of cultural labour (Fuchs and Sandoval, 2014: 488), taking into account all different forms of work that are directly and indirectly involved in the creation and sharing of academic knowledge (1) avoids an idealistic understanding of academic work that ignores its materiality, (2) considers the connectedness of technology and content and (3) can inform political solidarities between different groups within universities.

Conditions of Academic Labour

The neoliberal restructuring of universities has led to transformations such as reducing public expenditure, squeezing costs and allocating resources based on competition and quasi-market disciplines. These structural transformations also have an effect on the working conditions, practices and relations of subjects within universities. This is also reflected in a growing academic literature reporting about the changes in the working conditions, especially at places where the neoliberal restructuring can be considered as relatively advanced and has been going on for some decades such as the UK, Netherlands, the US and Australia (Lorenz, 2012: 600).

Sandoval (2013: 323–325) provides a systematic model of working conditions based on Marx's circuit of capital accumulation that can be applied to different sectors. The model identifies dimensions that shape working conditions in the capital accumulation process. In addition, the model includes the impact of the state's labour legislation on working conditions:

- Means of production: objects (resources) and instruments (technology) of labour
- Labour power: workforce characteristics, mental and physical health, work experiences
- Relations of production: labour contract, wages and benefits, labour struggles
- Process of production: labour space, labour time, work activity, control mechanism
- Commodity: labour product
- The state: labour legislation

The model helps to systematically analyse the labour process and can also be applied to academic labour. The overall aim of this section is to introduce an overview of working conditions at universities:

- Means of production: *Resources*: Resources in the academic labour process consist of knowledge, skills and practices of the human brain and hands. *Technology*: Technologies that are used in the academic labour process include, for example, libraries, computers, laboratories and equipment.
- Labour power: *Workforce characteristics*: Important characteristics of the workforce are class, gender, ethnicity, age and disability. *Mental and physical health*: Different empirical studies have reported about mental and physical health issues at higher education institutions (e.g. University and College Union, 2014). *Work experiences*: The question of how academics experience their working conditions is an empirical one. Several authors have already conducted empirical work in this context (e.g. Deem et al., 2007).
- Relations of production: *Labour contract*: One important aspect of an academic employment contract is its permanent/open-ended or temporary character. Many different forms of temporalities exist, including fixed-term, hourly paid and zero hour contracts. A tendency of casualisation and temporality of employment characterises higher education (Bryson and Barnes, 2000). *Wages and benefits*: The question of wages and benefits is a relational one. For example, the vice chancellor (or equivalent) at the University of Strathclyde, Glasgow, receives an annual salary of £343,000. In contrast, a FTE (full-time equivalent) annual salary of an hourly paid academic at the same university is £17,995 (with an assumed hourly rate of £23) (all data for the academic year 2014/2015: University and College Union, 2016a). This means the vice chancellor earns 19 times more than an hourly paid academic at the University of Strathclyde. Similar calculations can be worked out for other universities. *Labour struggles*: Academics have traditionally been a relatively privileged group of employees and universities were historically considered as communities with shared values and interests in the UK. According to Harvie (2006: 21), the opposition of academic unionism is nowadays more or less opposition to neoliberalism.
- Process of production: *Labour space and time*: Neoliberal universities have intensified work in terms of time and extended in terms of space with the help of digital technologies. Academics tend to have fluid boundaries between their working space and other spaces of human life and their labour and free time (Ross, 2000: 23). Always-on cultures have transformed the university to a fast academia (Gill, 2010: 237). *Work activity*: There is a tendency of narrow specialisation, routine tasks, division and standardisation of work in academia. In analogy to the assembly line worker, Hanley (2002: 30) describes this process as 'Taylorization of academic labor'. *Control mechanism*: Monitoring and audit cultures as new control mechanisms have been taking hold significantly at higher education institutions for some years now (Burrows, 2012: 357). Metrics operate at different stages, such as the institutional, national and international level, but all of them confront the individual academic (Burrows, 2012: 359). As response to the post-Fordist conditions, universities are

becoming increasingly corporately managed, which is described as 'new managerialism' (Deem et al., 2007). Academic professions are thereby broken up into controllable processes (Lorenz, 2012: 610).

- Commodity: *Labour product*: The work of academics results into research outputs such as publications and technical innovations and teaching degrees held by bachelor, master and PhD graduates.
- The state: *Labour legislation*: McGettigan (2013) argues that the broader vision of higher education in the UK is that the state rolls back gradually through processes of privatisation and the remaining public areas are characterised by quasi-market regulations. Different processes, policy considerations and initiatives have been brought forward in this context (McGettigan, 2013: 9).

All of these dimensions shape the working conditions at higher education institutions to a certain extent. I now move on to the impact of new information and communication technologies on universities and academic labour.

Academic Labour and Digital Media

The academic work process is today strongly linked to the usage of new information and communication technologies such as email communication, online education and digital registers for research, teaching and administration purposes. One can argue that educational technologies have been developed in analogy with the progress of the productive forces and reflects the historical development from agricultural to industrial to informational eras in capitalist societies. Although the application of technologies at universities is not new, the use of digital technologies is a relatively new phenomenon and has generated a rapid quantitative expansion that simultaneously raises questions of a qualitative shift. There has been a gradual expansion of educational technologies (quantity) that led to a new digital realm at universities (quality). The application of education technologies can thus be considered as a new and at the same time old development. A dialectics of continuity and discontinuity characterises the development of educational technologies.

Digital media are used for many different research and teaching purposes. Examples include: online libraries, digital communication, virtual networks, digital classrooms, wikis, blogs and Massive Open Online Courses (MOOCs). Digital academic labour is a specific form of academic labour that is mediated through digital media. Digital and non-digital media and resources often co-exist in the work experience of academics. Digital technologies and resources have neither displaced non-digital ones fully, nor are non-digital technologies and resources completely independent of digital ones. Different people have different degrees in blending digital and non-digital media at their work.

While the pedagogical impact of digital media is not the focus of this article, I would like to draw your attention to the economic aspect, especially in the context of teaching. Higher education institutions today compete on a global market for international students. Recruiting oversea students is particularly appealing in the UK, because institutions are not bound by the same restrictions as they are with Home and EU students – there is no cap in terms of fees and in terms of numbers. Generally speaking, there are at least three different possibilities to reach international students:

1. Foreign students come to the UK for studying at one of the universities
2. British universities install a branch campus abroad
3. Both remain in their home country and teaching is facilitated via digital media

The first option seems to be the most obvious one, but there are political restrictions in recruiting non-EU students – partly because the government has declared a target to reduce migration, which should also apply to students (McGettigan, 2013: 121) and brings some uncertainty in terms of economic planning for universities; partly because the recruitment of overseas students and the accompanied sponsorship of visas brings up immigration rules and an onerous and cost-intensive administrative system for higher education institutions (McGettigan, 2013: 121). This includes the proof of language skills and record keeping of attendance and study progress.

The second option is to establish satellite campuses abroad for local students being appealed to receive a degree from a (prestigious) British university. While the official claim is to strengthen international research relationships, it can be considered as a further strategy to access the population of countries such as India, China and Indonesia (Ross, 2009: 202). While there are today more than 200 oversea branch campuses mainly (co-)operated by US, UK and Australian universities, the success is rather limited and the business strategy can be considered as highly risky (McGettigan, 2013: 122–123).

The third option is to offer courses and programmes being delivered by means of digital media (online distance learning). From a technical point of view, online teaching requires teachers and students with some hardware (computer and headset), software (as listed above) and internet access. The university mediates this relationship. Online distance learning is technically independent of space and time for both teachers and students as they can theoretically work from anywhere. Those programmes have been primarily brought forward by major higher education institutions such as the Open University and the University of Edinburgh in the UK and Stanford University, Harvard University and the Massachusetts Institute of Technology in the USA. The student no longer needs to come to the foreign country, avoids being confronted with immigration regulations and saves money for travelling and relocation, while the university no longer has to invest in new campuses abroad; therefore, digital teaching can be considered to be a very promising business strategy in recruiting more overseas students, although it also attracts UK and EU students.

The three different possibilities are not a linear historical development, where one attempt replaced the other, but rather a complex and contradictory field of changing strategies and economic ups and downs in the higher education market. These practices co-exist simultaneously, but digital education seems to be the most promising at the moment. The Higher Education Funding Council for England (HEFCE) (2009: 7) is quite clear on this matter: 'Effective use of technology … can also help institutions in … attracting overseas students … Distance learning … will … assist with the recruitment and retention of (international) learners.'

For Marx, the mode of production is based on productive forces (means of production and labour power) and relations of production (property relations). The productive forces are a system of living labour forces and facts and factors of the process of production that cause and influence labour (Leisewitz, 1990: 939). The relations of production constitute social relations between human beings and specify who produces and who owns property (Krysmanski, 1990). If we take a look at the mode of production at universities, one can see that the productive forces and relations are changing in the realm of digital education:

- *Productive forces*: Although digital education causes new costs (e.g. for licence fees of digital programmes), universities are able to reduce the means of production such as buildings, equipment and facilities as they are outsourced to individuals and the private sphere. While students visit lecture halls, seminar rooms, laboratories, libraries, etc., operated by the university for bricks and mortar campus teaching, students visit a virtual space, but are physically at a private or other space of human life with an electronic device in the age of digital

education (van Mourik Broekman et al., 2015: 22–23). In addition, the university has to invest in technologists who establish and maintain digital learning environments, but digital education potentially reduces labour costs in the long term due to reproducibility (Noble, 1998). Different universities have different digital practices, but online distance learning can reduce labour power as lectures can be easily recorded and replayed, accompanied with some individuality. Due to the reduction of the productive forces, digital education can both provide a cost-efficient alternative and bring flexibility for universities in order to be able to respond quickly to changes in the higher education market in terms of demand (Massy and Zemsky, 1995). An online module can be theoretically provided very quickly due to reduced material necessities and thus makes it likely to react appropriately to economic ups and downs on the student market.

- *Relations of production*: Digital education poses new questions of intellectual property rights. Because ownership tends to follow authorship in copyright law, teaching staff traditionally owned their course material (Noble, 2001: 38). This is a long-established tradition and right at universities. If an academic left university, s/he had the right to take teaching material with him/her and was able use it for other purposes, because it belonged to the creator of educational content. As argued above, digital education can only reduce labour power and costs, if content can be recorded and reused (reproducibility). One could imagine a situation where a university aims to use recorded lectures and stored communication for an online module being originally developed by teaching staff, not working for this institution anymore. In case the university is not licensed to use this content, it could end up in either legal or economic problems. Higher education institutions thus have a strong interest in getting the intellectual property rights and licences of the developed teaching material. Universities must control the copyright. Different countries do have different practices, but it seems that the US higher education market is the most advanced in this context (Noble, 2001: Chapter 3). Noble (2001: 38) argues that research has already been commodified, but with digital education, course material follows a similar pattern. For research tasks, employees are contractually required to assign the patent rights to the university as a routine condition of employment. Similarly, employees might be forced to assign the copyright and licence of course material stored on PCs, website and courseware as a routine condition of employment in the realm of online teaching. This transforms the nature of teaching and the relationship between higher education institutions and their employees.

Digital education and technologies have an impact on the working conditions of academics. If we reconsider the different stages of the capital accumulation process as outlined in the previous section, one can see the risk that conditions of labour are being intensified and extended in the realm of digital media; to name but a few, the blurring of working space and other spaces of human life, the blurring of labour and free time, fast academia, always on cultures, deskilling, casualisation, electronic monitoring, digital surveillance, social media use for self-promotion, and new forms of intellectual property rights (Noble, 1998; Gregg, 2013; Lupton, 2014: 79–83; Poritz and Rees, 2017: 68–82).

One could argue that digital education and technologies widen access for people from poorer backgrounds, women, ethnic minorities and the disabled and thereby provide inclusion, equality of opportunities and social justice. For example, HEFCE (2009: 7–8) promotes that technologies enhance learning and teaching that open access and opportunity and bring equality of access, inclusion, flexible lifelong learning and international mobility. The argument that new technologies in education automatically bring enhancement can be considered as a techno-optimistic and techno-deterministic view that tends to ignore the social sphere and sees technology as being independent

of its social context (Bayne, 2015: 5). It is difficult to imagine how digital education should widen access for people from poorer backgrounds, if such programmes tend to be rather expensive with similar fees as their offline companions. Digital education can bring advantages for disabled people, being able to study at their own pace, but might involve the risk of new forms of social exclusion. Noble (1998) draws a possible future where digital education will become the second-class education, while traditional on-campus teaching will become the exclusive privilege of the rich and the powerful – the poor get a computer, the rich get a computer and a teacher. 'In the case of distance education, however, the digital divide is turned on its head, with the have-nots being compelled to take their courses online while the haves get to do it in person' (Noble, 2001: 90). In a similar vein, Giroux (2002: 448–449) argues that

> a class-specific divide begins to appear in which poor and marginalized students will get low-cost, low-skilled knowledge and second rate degrees from online sources, while those students being educated for leadership positions in the elite schools will be versed in personal and socially interactive pedagogies in which high-powered knowledge, critical thinking, and problem-solving will be a priority, coupled with a high-status degree.

Universities are keen on promoting that their offered online programmes are internationally recognised degrees and of equal value to on-campus programmes (e.g. University of Edinburgh, 2016), but the risk still exists that employers tend to be in favour of on-campus degrees and against online degrees when it comes to the recruitment process (Linardopoulos, 2012; Fogle and Elliott, 2013). Given the fact that digital technologies in higher education are still in a relatively early stage, the development of the cohort in terms of social background is difficult to predict and remains an empirical question. But it gets clear that online education fits neatly within the neoliberal agenda. An increasing need of a highly qualified, skilled and trained workforce characterises contemporary capitalism that leads to higher pressure of further education and lifelong learning processes. People tend to live under stressed and tightened circumstances, fulfilling several tasks and commitments such as full-time jobs and family and social relations at the same time (Hartmut, 2013). Digital education helps to compensate this dichotomy by offering a higher education qualification in a very flexible route as it tends to be independent of time and space. Digital education can thus be considered as a response to neoliberal conditions.

Conclusion and Alternatives

Based on a critical social theory approach and moving from the abstract to the contract level, this article has engaged with the history and context of universities, dealt with the forms and concepts of academic labour and provided a systematic analysis of working conditions at higher education institutions. It has furthermore discussed the impact of new information and communication technologies on academic labour.

According to Winn (2015: 4, 10), the academic labour studies literature tends to deal with historical, theoretical and critical questions inadequately. The aim of this article has thus been to contextualise universities historically within capitalism and to analyse academic labour and the deployment of digital media theoretically and critically. The key arguments can be summarised as follows:

- *Historical context*: The post-war expansion of the university can be considered as medium and outcome of informational capitalism and as a dialectical development of social achievement and advanced commodification.

- *Academic labour*: Academic workers and students are part of the knowledge workforce producing the commons, indirectly creating surplus value and exploited by capital. Academic labour is a specific historical form of academic work. Academic work is part of informational work that is part of cultural work. A broad definition of university labour, taking into account all different forms of work that are directly and indirectly involved in the creation and sharing of academic knowledge, can inform political solidarities between different groups within universities.
- A model of working conditions helps to systematically analyse the academic labour process and to provide an overview of working conditions at universities. The following dimensions shape the working conditions at universities: resources, technology, workforce characteristics, mental and physical health, work experiences, labour contract, wages and benefits, labour struggles, labour space and time, work activity, control mechanism, labour product, and labour legislation.
- *Digital media*: The academic work process is today strongly linked to the usage of new information and communication technologies. A dialectics of continuity and discontinuity characterises the development of educational technologies. Digital academic labour is a specific form of academic labour that is mediated through digital media. The deployment of digital media has an impact on the working conditions of academics, including the blurring of labour and free time, fast academia, and electronic monitoring.

I recently conducted interviews with precariously employed academics in Scotland (see Allmer, 2018). One of the results indicates that people value and see the importance of solidarity, participation and democracy. A young researcher tells me that speaking to other precariously employed academics helps to understand patterns of anxieties. She feels it might be better to organise those who are in similar situations and take some agency, instead of feeling alone and powerless:

> There is an awareness that there is loads of us in the same position which is the only comfort about it. I think it does get to the point where you just have to take some agency … Maybe we should try and use that, the people who are in a similar position to me, we should actually … rather than just feeling like we are alone, we should do something about that, instead of just waiting about. (Participant 8)

This advances the question about political potentials, challenges and strategies. Wright (2010: 304) distinguishes between three visions of social transformation that correspond broadly to the anarchist, social democratic and revolutionary tradition. The anarchist tradition revolves around social movements, aiming to build alternatives outside of the state; typically the labour movement plays a particular central role in the social democratic tradition, struggling on the terrain of the state; the revolutionary tradition is connected to the Marxist tradition, attacking the state and confronting the bourgeoisie. These strategies should be brought together not only to 'envision real utopias, but contribute to making utopias real' (Wright, 2010: 373). In order to avoid pitfalls of co-option and marginalisation on a political level, Wright's vision of the anarchist, social democratic and revolutionary tradition can be connected to the three sections of this article: digital media, academic labour and historical context. Although the deployment of digital media at universities entails the risk that conditions of labour are being intensified and extended, new information and communication technologies can also help to create critical, counter-hegemonic education alternatives outside of the university (*anarchist tradition*). A broad definition of university labour and a systematic analysis of working conditions point to the need of struggling on the terrain of the university (*social democratic tradition*). A historical contextualisation of the university within

capitalism indicates that the struggle for better universities should aim beyond criticising neoliberal developments and restoring Fordist configurations (*revolutionary tradition*):

- *Digital media – anarchist tradition*: Managing the progressive potentials of digital media, we need to establish and engage in critical education alternatives outside the university campus. This could involve open education movements (Winn, 2012), open access and copyleft resources (Hall, 2008), creative and digital commons, and the Wikiversity (van Mourik Broekman et al., 2015).
- *Academic labour – social democratic tradition*: We need to reclaim the university as site of struggle for all university workers, including academics, students, clerical, technical and manual workers. This requires solidarity, collectivity, participation, democratisation, resistance, opposition, unionisation (Bailey and Freedman, 2011) and can inform political solidarities between different groups within universities (and to find for example commonalities between outsourced cleaners fighting for sick pay, leave entitlement and pension scheme and hourly-paid academic staff at University of London's School of Oriental and African Studies (SOAS), as shown in the documentary 'Limpiadores' (2015) by Fernando González Mitjáns, see: https://www.youtube.com/watch?v=Upb3OK-jclM). 'We must generate new academic work, new academic culture' (Cardozo, 2017: 423).
- *Historical context – revolutionary tradition*: We need to connect the struggle at universities with the global struggle against capitalism. As stated in the introduction, modern universities have always been part of and embedded into capitalism in political, economic and cultural terms. 'The struggle for better universities can't be separated from the movement against global capitalism itself' (Callinicos, 2006: 7).

These various directions and strategies should be brought together in order to find commonalities of different struggles and contribute to making utopias real.

References

Allmer T (2018) Precarious, always-on and flexible: A case study of academic working conditions. *European Journal of Communication*, under review.

Bailey M and Freedman D (2011) *The Assault on Universities: A Manifesto for Resistance*. London: Pluto Press.

Bayne S (2015) What's the matter with 'technology-enhanced learning'? *Learning, Media and Technology* 40(1): 5–20.

Bourdieu P (1977) *Outline of a Theory of Practice*. Cambridge: Cambridge University Press.

Bryson C and Nikki B (2000) The casualisation of employment in higher education in the United Kingdom. *Academic Work and Life* 1: 187–241.

Burrows R (2012) Living with the H-Index? Metric assemblages in the contemporary academy. *Sociological Review* 60(2): 355–372.

Callinicos A (2006) *Universities in a Neoliberal World*. London: Bookmarks Publications.

Cardozo K (2017) Academic labor: Who cares? *Critical Sociology* 43(3): 405–428.

Chomsky N and Foucault M (2006) Human nature: Justice vs. power (1971): A debate between Noam Chomsky and Michel Foucault. In: Chomsky N and Foucault M (eds) *The Chomsky-Foucault Debate: On Human Nature*. New York, NY: New Press, 1–67.

Deem R, Hillyard S and Reed M (2007) *Knowledge, Higher Education, and the New Managerialism: The Changing Management of UK Universities*. Oxford: Oxford University Press.

Dyer-Witheford N (2005) Cognitive capitalism and the contested campus. In: Cox G and Krysa J (eds) *Engineering Culture: On the Author as (Digital) Producer*. New York, NY: Autonomedia, 71–93.

Dyer-Witheford N (2007) Commonism. *Turbulence* 1: 81–87. Available at: http://turbulence.org.uk/wp-content/uploads/2008/07/turbulence_jrnl.pdf.

Dyer-Witheford N (2011) In the ruined laboratory of futuristic accumulation: Immaterial labour and the university crisis. In: Peters M and Bulut E (eds) *Cognitive Capitalism, Education and Digital Labor*. New York, NY: Peter Lang, 275–286.

Fogle C and Elliott D (2013) The market value of online degrees as a credible credential. *Global Education Journal* 2013(3): 1–25.

Fuchs C (2008) *Internet and Society: Social Theory in the Information Age*. New York, NY: Routledge.

Fuchs C and Sandoval M (2014) Digital workers of the world unite! A framework for critically theorising and analysing digital labour. *tripleC: Communication, Capitalism & Critique* 12(2): 486–563. Available at: http://www.triple-c.at/index.php/tripleC/article/view/549.

Fuchs C and Sevignani S (2013) What is digital labour? What is digital work? What's their difference? And why do these questions matter for understanding social media? *tripleC: Communication, Capitalism & Critique* 11(2): 237–293. Available at: http://triple-c.at/index.php/tripleC/article/view/461.

Giddens A (1981) *A Contemporary Critique of Historical Materialism: Volume 1: Power, Property and the State*. Berkeley, CA: University of California Press.

Gill R (2010) Breaking the silence: The hidden injuries of the neoliberal university. In: Ryan-Flood R and Gill R (eds) *Secrecy and Silence in the Research Process: Feminist Reflections*. London: Routledge, 228–244.

Gill R (2014) Academics, cultural workers and critical labour studies. *Journal of Cultural Economy* 7(1): 12–30.

Giroux H (2002) Neoliberalism, corporate culture, and the promise of higher education: The university as a democratic public sphere. *Harvard Educational Review* 72(4): 425–463.

Gregg M (2013) Presence bleed: Performing professionalism online. In: Banks M, Gill R and Taylor S (eds) *Theorizing Cultural Work: Labour, Continuity and Change in the Creative Industries*. London: Routledge, 122–134.

Gulli B (2009) Knowledge production and the superexploitation of contingent academic labor. *Workplace: A Journal for Academic Labor* 16: 1–30. Available at: http://ices.library.ubc.ca/index.php/workplace/article/view/182232.

Hall G (2008) *Digitize This Book! The Politics of New Media, or Why We Need Open Access Now*. Minneapolis, MN: University of Minnesota Press.

Hanley L (2002) Educational technology and academic labour. *Workplace: A Journal for Academic Labor* 9: 28–33. Available at: http://ices.library.ubc.ca/index.php/workplace/article/view/184044.

Hardt M and Negri A (2004) *Multitude: War and Democracy in the Age of Empire*. New York, NY: Penguin Books.

Hartmut R (2013) *Social Acceleration: A New Theory of Modernity*. New York, NY: Columbia University Press.

Harvie D (2006) Value production and struggle in the classroom: Teachers within, against and Beyond Capital. *Capital & Class* 30(1): 1–32.

Higher Education Funding Council for England (HEFCE) (2009) *Enhancing Learning and Teaching through the Use of Technology*. Bristol: Higher Education Funding Council for England. Available at: http://webarchive.nationalarchives.gov.uk/20120716090505/http://www.hefce.ac.uk/pubs/year/2009/200912/.

Higher Education Statistics Agency (2016) Data and analysis. Available (accessed 28 September 2017) at: https://www.hesa.ac.uk/data-and-analysis

Horkheimer M and Adorno T (1969) *Dialektik der Aufklärung: Philosophische Fragmente*. Frankfurt am Main: Fischer Verlag.

Jessop B (2002) *The Future of the Capitalist State*. Cambridge: Polity Press.

Krysmanski H-J (1990) Produktionsverhältnisse. In: Sandkühler HJ (ed.) *Europäische Enzyklopädie zu Philosophie und Wissenschaften. Band 3*. Hamburg: Felix Meiner, 894–906.

Leisewitz A (1990) Produktivkräfte. In: Sandkühler HJ (ed.) *Europäische Enzyklopädie zu Philosophie und Wissenschaften: Band 3*. Hamburg: Felix Meiner, 914–945.

Linardopoulos N (2012) Employers' perspectives of online education. *Campus-Wide Information Systems* 29(3): 189–194.

Lorenz C (2012) If you're so smart, why are you under surveillance? Universities, neoliberalism, and new public management. *Critical Inquiry* 38(3): 599–629.

Lupton D (2014) *Digital Sociology*. London: Routledge.

Mandel E (1992) Introduction. In: Marx K (ed.) *Capital: A Critique of Political Economy: Volume Two*. London: Penguin Books, 11–79.

Marx K (1976) *Capital: A Critique of Political Economy: Volume One*. London: Penguin Books.

Massy W and Zemsky R (1995) Using information technology to enhance academic productivity. Available (accessed 20 February 2016) at: https://net.educause.edu/ir/library/html/nli0004.html

McGettigan A (2013) *The Great University Gamble: Money, Markets and the Future of Higher Education*. London: Pluto Press.

Noble D (1998) Digital diploma mills: The automation of higher education. *First Monday* 3(1). Available at: http://journals.uic.edu/ojs/index.php/fm/article/view/569/490.

Noble D (2001) *Digital Diploma Mills: The Automation of Higher Education*. New York, NY: Monthly Review Press.

Poritz J and Rees J (2017) *Education is Not an App: The Future of University Teaching in the Internet Age*. London: Routledge.

Ross A (2000) The mental labor problem. *Social Text* 18(2): 1–31.

Ross A (2009) *Nice Work If You Can Get It: Life and Labor in Precarious Times*. New York, NY: New York University Press.

Sandoval M (2013) Foxconned labour as the dark side of the information age: Working conditions at Apple's contract manufacturers in China. *tripleC: Communication, Capitalism & Critique* 11(2): 318–347. Available at: http://triple-c.at/index.php/tripleC/article/view/481.

Taylor L (2010) Of human greed: Laurie Taylor interviews David Harvey. *New Humanist*, June 29. Available at: https://newhumanist.org.uk/articles/2325/of-human-greed-laurie-taylor-interviews-david-harvey.

Terranova T and Bousquet M (2004) Recomposing the University. *Mute* 28: 72–81. Available at: http://www.metamute.org/editorial/articles/recomposing-university

Thompson E (1970) *Warwick University Ltd*. London: Penguin Books.

University and College Union (2014) UCU Survey of Work-Related Stress. London: University and College Union. Available at: https://www.ucu.org.uk/media/6908/UCU-survey-of-work-related-stress-2014—summary-of-findings-Nov-14/pdf/ucu_stresssurvey14_summary.pdf.

University and College Union (2016a) HE rate for the job. Available (accessed 21 April 2016) at: https://www.ucu.org.uk/article/8087/HE-rate-for-the-job

University and College Union (2016b) *Workload is an Education Issue: UCU Workload Survey Report 2016*. London: University and College Union. Available at: https://www.ucu.org.uk/media/8195/Workload-is-an-education-issue-UCU-workload-survey-report-2016/pdf/ucu_workloadsurvey_fullreport_jun16.pdf.

University of Edinburgh (2016) What is online learning? Available (accessed 19 July 2017) at: http://www.ed.ac.uk/studying/postgraduate/degree-guide/online-learning/about

van Mourik Broekman P, Hall G, Byfield T, et al. (2015) *Open Education: A Study in Disruption*. London: Rowman & Littlefield Publishers.

Winn J (2012) Open education: From the freedom of things to the freedom of people. In: Neary M, Stevenson H and Bell L (eds) *Towards Teaching in Public: Reshaping the Modern University*. London: Continuum, 133–147.

Winn J (2015) Writing about academic labour. *Workplace: A Journal for Academic Labor* 25: 1–15. Available at: http://ices.library.ubc.ca/index.php/workplace/article/view/185095.

Wright EO (1978) *Class, Crisis and the State*. London: Verso Books.

Wright EO (1997) *Class Counts: Comparative Studies in Class Analysis*. Cambridge: Cambridge University Press.

Wright EO (2010) *Envisioning Real Utopias*. London: Verso Books.