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Chapter 9. Beyond **competence**, thinking through the changes:
Economy, work and **neo-Liberalism**

James Avis

In Technical and Vocational Education and Training:
Issues, Concerns and Prospects 23

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**Chapter 9. Beyond competence, thinking through the changes:
Economy, work and neo-Liberalism
James Avis**

The chapter considers workplace learning, conceptualisations of competence and theorisations of cognitive capitalism. This discussion needs to be set within the wider socio-economic context characterised by an increasingly turbulent environment in which the old certainties surrounding industrial Fordism of jobs for life have been found wanting. This has been particularly the case in societies closely wedded to neo-liberalism such as the US and UK. These societies are marked by significant inequalities of wealth and income, polarised labour markets, as well as substantial levels of underemployment, unemployment and over-qualification. Economic turbulence allied to underemployment, unemployment and over-qualification has been a longstanding characteristic of waged labour in the emerging economies and is also found in continental Europe, even though the hegemony of neo-liberalism is in some instances somewhat softened. For some writers the logic of capitalist development anticipates forms of social production which carry progressive possibilities whereas for others the prognostication is much bleaker (Adler and Heckscher 2006; Engeström 2010). The chapter explores these debates as they serve to frame the manner in which we make sense of and engage with notions of competence and knowledge. The chapter draws on discussions of vocationalism, vocational pedagogy as well as the constitution of vocational knowledge, debates set within particular historic, socio-economic and national contexts. It points towards the limitations of analyses of workplace learning and in so doing draws upon conceptualisations of 'really useful knowledge' and subject based disciplinary knowledge. Workplace learning can easily fold over into an instrumentalism concerned with enhancing variable labour power. The chapter argues for recognition of the articulation between practice-based and employer interests in VET, set against wider disciplinary understandings and access to powerful and transformative knowledge. It is suggested that disciplinary knowledge, when allied to workplace experience, can be appropriated by oppressed and marginalised groups thereby becoming 'really useful knowledge' to be marshalled in the struggle for social justice. This then is the pedagogic challenge - to open-up possibilities that themselves presage not only the transformation of practice but also social relations.

This chapter seeks to synthesise literature that has addressed workplace learning, competence as well as changes in the capitalist mode of production. There is a particular difficulty in the analysis of competence and its relationship to capitalism. This arises in part as a consequence of the level of the analysis with the notion being derived from and related to specific social formations, and in part because of this specificity as well as the very fluidity of the term. The notion of competence, as Sawchuk (2009) suggests, is a floating signifier

with its meaning varying over time, from society to society, as well as in relation to the particular occupational tasks addressed (see Winterton 2009; Mitchell and Boak 2009). Not only do we encounter this fluidity, but the term is embedded in vocational education and training policy discourse in distinctive ways. Thus the notion of competence will carry varying meanings in different VET systems and can straddle narrow job specific definitions, as found in Anglo-Saxon models, to more holistic ones as seen in Germany and Holland (see Mulder et al 2009). Alongside these differences shaped by national VET systems, the European Qualification Framework seeks to create a structure based on learning outcomes that aims to facilitate labour mobility across the union (for discussion see Méhaut & Winch 2012). This is not withstanding national variations in the way in which competence is conceived and enacted in VET training systems. Brockmann, et al (2009; 2011) have usefully explored the different linguistic meanings attached to the term across the EU and in particular those found in English, French, Dutch and German (see also other papers in the 2009 Special Issue of the *Journal of European Industrial Training*).

This chapter seeks to explore the limits and possibilities of competence for its social justice and progressive possibilities. It considers whether the term is so wedded to capitalist interests that it is necessarily compromised. In addition, it raises the question of the way in which we should make sense of competence in the new socio-economic conditions currently faced. Do we need to go beyond the term despite the progressive readings that some have attach to it? However, the first task is to examine conceptualisations of competence.

Conceptualisations of Competence

Below are different conceptualisations of competence which have been selected to illustrate the range of understandings attributed to the term. The first is based on Mulder's description of Dewey's stance towards competence that aligned this not only to work but also to citizenship and democratic participation in wider society.

Dewey saw competency as the general public did, as the ability to create a livelihood, but also as the minimum requirement to enable the pursuit of an independent career that is chosen in freedom, the broad mastery of professionalism which needs to be related to citizenship, which enables people to participate in the democratic society and a vocation or profession in a self-determined way. (Mulder 2014, 112-113)

In Biemans et al's conceptualisation there is a tighter focus on the capacity of an individual or indeed organisation to attain a specific goal, but as with the previous citation the notion of competence may be extended beyond the workplace to its value and attitudinal dimensions.

'Competence' is the capability of a person (or an organisation) to reach specific achievements. Personal competencies comprise integrated performance-oriented capabilities, which consist of clusters of knowledge structures and also cognitive, interactive, affective and where necessary psychomotor capabilities and attitudes and

values, which are required for carrying out tasks, solving problems and more generally, effectively functioning in a certain profession, organisation, position or 'role'. (Biemans, Wesselink, Gulikers, Schaafsma, Verstegen and Mulder 2009, 273)

In contradistinction, Sandberg mobilises a socially situated construction of competence, referring to the understandings workers' attach to work.

The basic meaning structures of workers' conceptions of their work constitutes human competence. It is workers ways of conceiving work that make up, form, and organise their knowledge and skills into distinctive competences in performing their work. (Sandberg 2000, 20)

Finally, from a rather different stance, and in a discussion of social unionism and skill/competence Sawchuk refers to "build[ing] practical capacity to transcend current labor processes, job and technological design for greater economic democracy" (2009, 137).

The above address competent work performance, the collective and individual processes involved, as well as the space for innovation and creativity that goes beyond existing practice, anticipating not only the transformation of workplace processes but also wider society. However, caution needs to be exercised when considering this reading of competence. On one level it ignores narrow conceptualisations whilst on another plays down the manner in which capital appropriates and colonises worker skills. Questions of power and control need to be at the forefront of analyses together with an acknowledgement of the on-going transformation of capitalist relations as these seek to adapt to new conditions in order to secure the interests of capital.

Importantly, the capitalist **mode of production** is not all of a piece and whilst much is made of its transformations, these should be understood in terms of its 'evolution' set alongside sedimentations of the past. In other words, earlier forms of production will exist alongside those that are emerging. Thus for example, Fordist forms of work organisation will co-exist with **Post-Fordist** ones, each drawing upon particular conceptualisations of competence. Amazon would be a good illustration of this with extensive use made of digital technologies alongside the deployment of Fordist labour processes in their warehouses. The latter has a strong resonance with **Taylorist scientific management**, with its detailed division of labour (Taylor 1911; Dato 2013). This is similarly the case with subsequent developments in capitalism where different forms of production exist side by side.

Much has been made of notions such as the knowledge, information or networked society that carry implications for the manner in which competences are conceived as well as their mobilisation in work based processes. Here notions of **creativity** and **innovation** are drawn upon, though such processes are set within the relations of power present in the workplace - after all capital has always sought to appropriate variable labour power. Because of its evasion of capitalist antagonisms, the argument that Post-Fordism was able to overcome the oppressions and exploitations embedded in Fordist work relations has been subject to extensive critique. However, there are particular analytic currents in radical thought that

assert that **knowledge based economies** (KBEs) hold within them not only radical but also transformative possibilities flowing from developments in the forces of production and changes in the way surplus value is generated. Such arguments tend to be located within what could be described as the knowledge economy and creative industries. These arguments are interrogated and it is suggested, as with earlier discussions of Fordism and Post-Fordism, that such processes are amenable to capitalist appropriation.

It is relatively easy to associate **behaviourist models of competence**, as seen in western societies with Fordism - the apogee of **industrial capitalism**, and to link this with **social democratic** welfarism. In this, a context characterised by mass production and consumption there was an affinity between behaviourist models of competence and a detailed division of labour in which tasks were broken down into a series of discrete elements. Such approaches to competence have been criticised for their over-specification and fragmentation of tasks (Mulder 2014, 129) as well as for the manner in which they atomise and simplify working relations (Bound and Lin 2013, 403). In addition they veer towards a 'technical functionalism' (Elleström and Kock 2009, 38) that is predicated upon a model of consensus that plays down wider social antagonisms between labour and capital. Through the simplification of workplace activities behaviourist models ignore the complexity of work, the decisions that are taken and the judgements (Beckett 2009) made, in what may appear at first sight to be simple tasks. It is important to remind ourselves that it is through the exercise of variable labour power that surplus value is accrued by capital.

The increasing salience of competence as well as the development of more collective and holistic understandings of the term arose as a result of a number of factors. These include: the putative decline of industrial capitalism in the west; the increasing importance attached to knowledge and **creativity**; as well as the secular failure of education to 'produce' the forms of labour required by employers. Consequently cognitive and generic understandings of competence developed alongside those that emphasise the importance of socially situated practices. In the latter case competences are articulated with the specificity of the workplace, set within a particular temporal and social location that necessitates the mobilisation of particular skills, knowledge and affect. The broader context in which these changes are placed is one in which Post-Fordist rhetoric becomes significant, resting alongside the notion of the knowledge worker and the emerging hegemony of neo-liberalism. Thus we encounter discussions concerned with the development of managerial or professional competences that emphasise the 'freedom' to be innovative and creative, noting that through such practices institutions will develop both competitiveness and sustainability. There is a paradox, the emphasis upon innovation and creativity which construes this as developing through individual and collective processes is set within a reductive neo-liberalism that emphasises the market, commodification and instrumentalises social relations. In this instance education is only valued for its contribution to economic competitiveness which can lead to a truncated engagement with disciplinary knowledge. This is because it is only the 'knowledge and skills' that can be directly mobilised at work

that are valued, that which does not have an occupational purchase is devalued rendering it virtually 'useless'. Mulder (2014, 109) refers to the disconnection between education and the labour market that provided the spur for the development of competences. In addition, ideas surrounding the 'knowledge' economy, allied with the rapidity of technological change meant that the development of technological and scientific knowledge in the academy was out of step with that required by 'industry' which moved at a much faster pace. Consequently innovative and creative practices, and indeed workplace learning, assumed far greater significance. It was thought this would enable quick responses to changed circumstances facilitating the development of new practices and processes. In this way a premium was placed on creativity and innovation in the workplace and the learning that surrounded this leading to the development of and increased importance attributed to mode 2 knowledge (Gibbons et al 1994, 1-17). There are two points to be made the first addresses autonomy - in order to be innovative and creative the worker requires some control over the labour process. Secondly, by acknowledging the potential for creativity and innovation of those in nominally unskilled work, greater value and dignity is awarded to such labour with the concomitant implications for social justice. There is however a third implication that aligns the development of digital technologies with forms of social production which emphasise the creation of surplus value external to the capitalist organisation. This is captured by the notion of **cognitive capitalism** as well as peer-to-peer software development and so on. In this case social production can be Janus like, amenable to capitalist colonisation as well as being a site of resistance to such relations.

Workplace learning and social justice

Really useful knowledge' was a knowledge of everyday circumstances, including a knowledge of why you were poor, why you were politically oppressed and why through the force of social circumstance, you were the kind of person you were, your character misshapen by a cruel competitive world. (Education Group 1981, 37)

You move from one boring, dirty, monotonous job to another boring, dirty, monotonous job. And somehow you're supposed to come out of it all "enriched". But I never feel "enriched" – I just feel knackered (Nichols and Beynon 1977, 16)

The first quotation is drawn from the work of Richard Johnson in which 'really useful knowledge' is set against '**useful knowledge**'. The former anticipates the transformation of societal relations with the latter anticipating the transformation of work processes thereby developing the productive potential of workers. The second quotation is from Nichols and Beynon's 1970s study of a chemical plant. Both passages are salutary with the first drawing upon nineteenth century discussions of education, knowledge, work and transformation. The second, drawn from the last century, reflects a moment in which there was a concern with the humanisation of work and job enrichment. It is important to recognise that the

interest in workplace learning (WPL), knowledge, practice and transformation has in various guises had a long history. After all, it is pivotal to the on-going development of capitalism and capital's interest in variable labour power and value-added waged labour (see Avis 2010).

WPL is also important for workers' survival strategies in oppressive workplaces, as well as in the development of resistance to exploitative conditions, with such practices frequently involving collective processes. However, the contemporary interest in WPL derives from at least two currents. Firstly, there is the realisation that in societies such as Britain the majority of the workforce in 2020 will have already left full-time education. Felstead et al. write,

The fact that 70 per cent of the UK workforce of 2020 are already in work has increased its [WPL] saliency still further, since most are beyond the reach of schools and may be out of reach of further and higher education. (2009, 3)

Allied to this is a second current whereby the increasing speed of change means that a premium is placed on WPL, aligning it with the rhetoric of the knowledge society. In other words we will all be enjoined to learn at the workplace with such changes informing the way in which WPL is conceived.

Analyses of WPL often assume an optimistic hue, with writers such as Billett (2005) arguing that the acknowledgement and credentialising of WPL serves the interests of social justice through its recognition of worker skills and knowledge that are frequently overlooked and remain outside the qualification system (and see Boud and Symes 2000, 18). There is something of a moral imperative in Billett's concern to value waged labour that others may construe as demeaning. Consequently lesser emphasis is placed on the negative aspects of WPL. However, for writers concerned with WPL these arguments sit alongside issues of equal opportunity and access to educational credentials. Billett links the idea of 'just arrangements' with the recognition of the skills disadvantaged workers have developed in the course of their working life. He writes,

Finding means to legitimately and authoritatively recognise skills acquired through work hold the prospect of providing *just arrangements* for these otherwise disadvantaged workers as well as those requiring recognition throughout their working life. [*emphasis added*] (Billett 2005, 944).

However, there does seem to be a difficulty with Billett's position. At best he seeks to accord some dignity to those who labour in low paid and undervalued jobs. However, this does little to challenge the social relations of work, its neo-liberal context or indeed current conditions of austerity.

This is not to deny the salience of WPL for capitalist enterprises for without this, these could barely function. Nor is this to deny the very real skills disadvantaged workers develop at the workplace thus acquiring 'useful knowledge'. To the extent that these concerns address social justice they do so through credentialism, by according dignity to workers whose labour has been devalued and through the recognition that even in the case of unskilled jobs there will be some space for innovatory and creative practices. It is however important to recognise that in industrial capitalism **variable labour power** created the surplus value that capitalists appropriate - in other words capital appropriates the cognitive/intellectual abilities of workers. Gramsci suggests, "All men are intellectuals... but not all men have in society the function of intellectuals" (1971, 9). The research on WPL that seeks to validate, dignify and acknowledge the labour of disadvantaged workers illustrates the way in which cognitive capabilities are marshalled in the creation of value (see for example, Fuller and Unwin 2003; Fuller et al 2009).

The preceding has focused on the debate surrounding supposedly low skilled jobs and workplace learning and has not engaged in a broader discussion of professional competence. There are two reasons for doing so. Firstly, **technicist models of competence**, whilst being able to specify the features of a particular task and the requisite outcomes, are necessarily limited. They tend to ignore the knowledge and skills workers develop through their labour – in other words the contribution of variable labour power. Secondly, professional work is often viewed as the site in which creative and innovative solutions can be developed. Such a stance is embraced in **holistic models of competence** that acknowledge individual and collective forms of working that can develop innovative solutions to the problems encountered. In this case the social justice implications are accented differently to that found in unskilled labour. A Deweyian understanding of **professional competence** aligns not only with occupational autonomy but also with citizenship and participation in a democratic society. Such an understanding of competence comes close to Lacey's discussion of **collective intelligence**.

Skills and talents are concerned with solving problems within already existing paradigms and systems of knowledge. Intelligence has to do with understanding the relationship between complex systems and making judgements about when it is appropriate to work within existing paradigms and when it is appropriate to create new courses of action or avenues of thought.... *Collective intelligence* [is] defined as a measure of our ability to face up to problems that confront us collectively and to develop collective solutions. [*emphasis added*] (Lacey 1988, 93-94)

However, in a context of austerity, audit and performativity in which professional and managerial labour is being reshaped, work has become all pervasive, raising questions about the progressive features of such work. In Marazzi's terms "one's entire life is put to work" (2011, 113) with the division between work and non-work becoming increasingly blurred. The development of collective intelligence allied to rather more expansive models

of competence is readily amenable to capitalist appropriation. The question is whether the notion of competence has become inextricably wedded to capitalist interests, whereby the progressive portrayal of such features may be blunted whilst simultaneously serving ideological purposes. The point is that these practices are messy and contradictory.

There is a paradox in the suggestion that our 'entire life is put to work', for at the same time as we marshal our abilities in waged labour Cederström and Fleming suggest that,

Self-exploitation has become a defining motif of working today. Indeed the reason why so little is invested by large companies into training is because they have realized that workers *train themselves*, both on the job, using their life skills and social intelligence, and away from the job, on their own time. (2012, 8)

Under cognitive capitalism 'free' labour is seen as increasingly important in the creation of value and for this reason it is suggested that in contrast to industrial capitalism a new regime of accumulation has developed. This new regime is centered upon digital labour and the forms of collective and social engagement that are facilitated by digital technologies. This also raises questions about the manner in which we theorise and make sense of competence – a term that is frequently tied to waged labour.

Cognitive Capitalism

A new political landscape has crystallized transforming the old tension between capital and labour into one between capital and life. Its manifesto is defined not by the demand for more, less or fairer work, but the end of work. (Fleming, 2012, 205)

Theorisations of cognitive capitalism suggest that capitalism has entered a new stage of development. Digital technologies and the increasing emphasis placed upon knowledge illustrates this, as does the emphasis on innovation and creativity. The move from Fordism to Post-Fordism and the decline of industrial capitalism in the West similarly reflects this process (see Avis 2013). It is important to acknowledge this is not based on an empiricist argument but rather upon developments at the leading edge of the economy that represent a new social imaginary and emergent hegemonic notions of capitalist relations, or what might be described as 'trajectories of evolution' (Boutang 2011, 60). Boutang (2011, 60) points out that Marx, in his study *Capital*, did not examine the largest working population in England at that time, namely domestic servants, but rather focused on a much smaller group of factory workers, anticipating the emergent hegemony of industrial capitalism. For Vercellone cognitive capitalism,

refer[s] to a system of accumulation in which the productive value of professional and scientific work becomes dominant and the central stakes in the valorization of capital relate directly to the control and transformation of knowledge into fictitious goods. (2009, 119)

Or as Fumagalli (2010, 62) suggests there are three pillars upon which cognitive capitalism is built: the role of financial markets as motors of accumulation; the generation and the diffusion of network knowledge as the main source of capitalist valorisation that redefines the relationship between living and 'dead' labour; and finally the decomposition of the workforce leading to precariousness.

These arguments align with others addressing **financialisation** which suggest that the manner in which surplus value is produced has been transformed (Marazzi 2011). That is to say, the 'knowledge economy' is qualitatively different to industrial capitalism, representing a new stage of development in which surplus value is appropriated in a fundamentally different way. In some respects this reflects historical processes of primitive accumulation and the appropriation of common land in the early stages of capitalism. Industrial capitalism was orientated towards the accumulation and expansion of capital whereas the current stage is concerned with scarcity, more akin to **monopoly capitalism** (Baran and Sweezy 1966; Foster and Magdoff 2009). This argument prioritises the development of knowledge viewing it as a collective and implicitly democratic accomplishment that occurs outside the direct control of capital. In contradistinction to those accounts of WPL in which learning is centred on work, cognitive capitalism emphasises the role of 'common' collectively formed knowledge developed outside the labour process which is then appropriated by capital in the pursuit of **surplus value**. Gorz points out that cognitive capitalism operates in a different manner to industrial capitalism in that its,

main productive force, knowledge, is a product that is in large part, the outcome of an unpaid collective activity, of a 'self production' or 'production of subjectivity'. It is to a large extent, 'general intelligence', shared culture, living and lived practical knowledge' (Gorz 2010, 52)

These arguments are important as they serve to problematise those understandings of competence that link these tightly to the workplace (see, Svensson, Randle and Bennich 2009) The following comments on two closely related responses to the conjunctural conditions currently faced. The first concerns the neo-liberal subject, the 'dead man working' of Cederström and Fleming (2012), who discuss the manner in which work, that is to say waged labour, has permeated all aspects of our lives. This is in contrast to the Fordism of industrial capitalism which was marked by specific working times.

What makes capitalism different today is that its influence reaches far beyond the office. Under Fordism, weekends and leisure time were still relatively untouched. Their aim was to indirectly support the world of work. Today, however, capital seeks to exploit our sociality in *all* spheres of life. When we all become 'human capital' we not only have a job, or perform a job. We *are* the job. (Cederström and Fleming 2012, p7)

As against the above, the conditions in which we are placed also carry the potential for a rather different response - the refusal of work - that is to say of waged labour. This takes us back to the **Italian Workerism** or **Operaismo** of the 1960s and 70s. What is important for the current discussion surrounds certain features of the analysis of capitalism found therein. In

contrast to arguments that emphasise the 'human made capital' (Rikowski 1999) and the colonisation of our subjectivities by waged labour in which we become 'the job', Workerism holds out the prospect for a rather different response. Berardi, commenting on a Fordist moment set within 1970s industrial capitalism, states,

In the car production cycle, labor had a mass depersonalized character: it is in these sectors that the refusal of work exploded... In the 1970s the entire European car production cycle was stormed by waves of workers' fights, sabotage and absenteeism. (Berardi 2009, 28)

The second point related to the current conjuncture concerns the salience of Workerist analyses that rather than viewing the development of capitalism as a consequence of accumulation strategies and the pursuit of value, is understood as capital's response to **class struggle**. Lotringer writes. "It was Italian workers' stubborn resistance to the Fordist rationalization of work... that forced capital to make a leap into the post-Fordist era of immaterial work" (2004, 11). Without engaging with the correctness or empirical veracity of Workerist accounts, they do raise salient questions. These writers, commenting on the struggle against industrial capitalism in the 1960s and 70s, emphasised the **refusal of work**. Notably, at that conjuncture it was the collective solidarity of the working class that enabled this 'refusal'. However, this argument suggests that subsequent capitalist developments were a response to this and were attempts to overcome worker resistance. Such analyses point towards the development of Post-Fordism and the increasing importance attached to immaterial labour and cognitive capitalism. These shifts in capitalist development could be seen as attempts to circumvent the refusal of work and undermine the solidarity of the working class. Such arguments raise questions about the way in which we understand the 'turn' to competence and in particular the interest in behavioural and social competences. They relatedly raise questions about the way in which we theorise competence - that is to say, those models that emphasise professional autonomy and creativity but which also make a link to the development of citizenship and democratic engagement in wider society and social justice. A Workerist analysis suggests that this is an ideological sleight of hand that seeks to secure the interests of capital and pacify the class, albeit that this is a site of struggle.

Some writers loosely linked to Workerism discuss cognitive capitalism and how work has not only colonised our lives but the way in which the production of surplus value has increasingly shifted to the private sphere (see Lotringer and Marazzi 2007). There is some resonance with feminist theory and the significance attached to **domestic labour**, the salience of work therein and its relationship to the production of value (see, Federici 2012; Fortunati 1995; Weeks 2011). On a slightly different note, we could think about digital technologies and allied notions of social production and **co-configuration** as well as the manner in which activities occurring outside formal waged relations can create surplus

value. For Engeström (2010), as with Adler and Heckscher (2006), the logic of capitalist development arising from the transformation of the forces of production is towards the incipient socialisation of the **means of production**. Engeström (2010, 232) draws upon Victor and Boynton (1998, 233) to illustrate the direction of change in the modes of production, from craft production to subsequent developments where we encounter conceptualisations of mass customisation, co-configuration, leading towards social production. In the latter case, we may use Facebook to keep in touch with family and friends but it will also generate surplus value, or if you prefer advertising revenue. In addition, through the labour involved in constantly up-dating our pages we invite our contacts to re-visit the site and encounter the advertising therein. At the same time these pages may be used for networking, with all the contradictions and tensions that this generates (Coté and Pybus 2011). Allied to these processes we encounter terms such as, co-opetition, produsers, 'playbor', Pro-Ams. Engeström refers to Benkler's (2006) work on P2P (peer-to-peer), open source and the development of software and social production. Peters writes in relation to open science that,

Open source initiatives have facilitated the development of new models of scientific production and innovation where distributed peer-to-peer knowledge systems rival, the scope and quality of similar products produced by proprietary efforts... Proponents say these "open access" practices make scientific progress more collaborative and therefore more productive. (2013, 7)

Such practices are facilitated by digital technologies and the related networks, with "big science" drawing upon teams of scientists who are linked by global networks as well as Pro-Ams who provide free labour, often through their help in analysing "big data". In some respects these networked practices which draw on social media increasingly reflect academic labour processes as well as contributing to the colonisation of life by work. This means we need to rethink the notion of competence in a context where productive labour takes place external to the firm and 'employment relations'.

Importantly, within immaterial and cognitive capitalism, creativity, innovation and knowledge are thought to be the main sources of value. This rests alongside a number of other claims such as the **marketisation** and **commodification** of what was formerly delivered by the welfare state - education, health services and so on (Roth, 2010). This expansion of marketisation derives from the crisis of profitability and the desire to expand commodity relations so as to provide additional sources of profit. More significantly there is another argument that places knowledge centre stage. This draws on Marx's (1973) discussion in the *Grundrisse* on the significance of science for the development of the forces of production allied to the formation of the collective worker. Certain features of Fordism facilitated the shift towards cognitive capitalism. For example, the development of the welfare state and universal education contributed towards a "mass intellectuality" that provides the bedrock for the knowledge economy. Vercellone (2008) refers to 'the constitution of a diffuse

intellectuality generated by the development of mass education' (unnumbered) allied to increasing levels of training. In addition he argues the social struggles that secured 'the spread of social income and welfare services' (unnumbered) resulted in conditions favourable to the development of a knowledge based economy.

The significance of the above is that it prioritises both the development of knowledge and views this taking place outside the direct control of capital, with surplus value being appropriated in a qualitatively different manner to that found within industrial capitalism. This process is partly captured by the notion of the **biopolitics** of labour whereby,

one's entire life is put to work, when knowledges and cognitive competences of the workforce (the *general intellect* that Marx spoke about in his *Grundrisse*) assume the role played by machines in the Fordist period, incarnated in the living productive bodies of cooperation, in which language, effects, emotions and relational and communication capacities all contributed to the creation of value. (Marazzi 2011, 113)

For those who adopt this argument the knowledge and competences of the workforce are developed collectively by living labour and importantly are external to capitalist relations. It is in this sense that capital is attempting to subsume the 'common' and explains why the labour theory of value is thought to be redundant. However, having said this it is important to acknowledge that:

The mechanical transformation of matter by means of a twin expenditure of energy and labour power does not disappear but it loses its centrality in favour of a cooperation of brains in the production of the living by means of the living, via the new information technologies, of which the digital, the computer and the Internet are emblematic in the same way in which the coal mine, the steam engine, the loom and the railroad were emblematic of industrial capitalism. (Boutang 2011, 57)

Earlier Boutang stated that cognitive capitalism, "in no sense eliminates the world of material industrial production. Rather it rearranges it, reorganises it and alters the positioning of its nerve centres" (2011, 48). The significance of arguments that stress the centrality of living labour and the importance of social production in value creation means that increasing numbers of people are placed outside a direct relationship with capital becoming part of a surplus population. In the past we would have referred to this group as a reserve army of labour.

This brief exploration of Workerism and cognitive capitalism may appear somewhat removed from a discussion of WPL and the notion of competence but it serves to raise a number of pertinent issues, key amongst which is the relation of these to social justice. A

workerist analysis suggests that competence in either a narrow or expansive version is wedded to capitalist interest being concerned with the development of variable labour power. The debates surrounding cognitive capitalism draw our attention to the way in which our lives beyond waged labour are put to work. This similarly problematises the notion of competence.

It is also important to acknowledge the critiques that have emerged in response to debates surrounding cognitive capitalism and **immaterial labour**. Camfield (2007), for example, has developed a swingeing critique of Hardt and Negri's concept of immaterial labour suggesting the term is so broad as to be all encompassing and incoherent (and see Hardt and Negri, 2000, 2004, 2009). The emphasis on the mobilisation of living labour in the generation of surplus value external to capitalist relations, has also been critiqued. Rikowski's (1999) conceptualisation of the 'human made capital' is pertinent here. He suggests that we introject the contradictions of work that exist within capitalism and become complicit in our own exploitation. Additionally the redundancy of the labour theory of value can also be questioned if we consider the intensification of labour. Rather than seeing a rupture between capitalist labour processes and the rest of life we could point to a continuity whereby work becomes all encompassing (Caffentzis 2011). There are those who draw attention to the crisis surrounding the over accumulation of capital and the manner in which it constantly seeks to secure new forms of valorisation (Harvey 2010).

Perhaps we should re-evaluate arguments addressing the refusal of waged labour and those that suggest that as a result of a diffuse intellectuality we are contributing towards the development of value external to the capitalist enterprise. Earlier Cederström and Fleming were cited who suggest that, "Self-exploitation has become a defining motif of working today" (2012, 8). They go on to argue, "meaningful workplace politics ought not to be calling for fairer work, better work, more or less work, but *an end to work*" (2012, 8), or as Berardi suggests:

In reality technological development tends to make manual labor useless and its evaluation in terms of wages impossible. But since the relational context where this message and this process is inserted is that of capitalism, which is founded on wage-earning regulations, a double bind starts functioning (Berardi, 2009, 66)

If such an argument were accepted it would undermine those authors who in a conventional sense celebrate waged labour, seeking to dignify and accord it value. It could be suggested that such work becomes a means of disciplining labour and serves as a prop for capitalism. Glaser (2014) in discussing Graeber's (2013) work argues that 'bullshit jobs', or what might alternatively be described as **'busy work'**, tie us to capitalist relations. This may derive from the value we accord to waged labour but also from the fact that "a population that is busy and tired is less likely to revolt" (Glaser 2014, 83). These arguments suggest that much productive, or what we might view as worthwhile or really useful labour arises external to

capitalist relations. If much waged labour is merely 'busy work' with 'technological development tend[ing] to make manual labor useless' (2009, 66) and, if as a result of our collective endeavours we create surplus value external to the capitalist organisation, we encounter an argument justifying a guaranteed social income. This is because our activities external to waged labour create value (Boutang 2011, 160; Gorz 2010). Paradoxically this would open up the possibility of 'really useful work' that extends beyond the confines of neo-liberalism and capitalist relations. Perhaps this could cohere with and go beyond Dewey's construction of competence thereby facilitating the development of citizenship and democratic participation in a wider society committed to social justice.

The provision of a **guaranteed social income** raises a number of issues, one of which concerns the role and autonomy of the national state within the current stage of capitalist development. A sustainable guaranteed social income is predicated on the state being able to deliver this, thereby re-introducing a type of **social democracy**. It is important to acknowledge that post-war social democracy and the development of the social state was won as the result of struggle set within very particular conditions which may not be replicable. The post war social state arose as a consequence of the shifting balance of power between labour and capital, in favour of the former, with the subsequent move towards neo-liberalism representing the re-appropriation of power by capital. If accepted, this argument suggests that inclusive or progressive varieties of capital may only temporarily ameliorate the excesses of capitalism - that is unless they presage a fundamental transformation of socio-economic and political relations. This is because such change is the outcome of struggle and alterations in the balance of power between capital and labour and therefore will be temporary, despite assertions to the contrary. We need only consider the recent history of the social state - after all, Fordism was set in exceptional circumstances. A guaranteed social income would necessitate transcending capitalist relations, and in current conditions this would be at best a form of revolutionary reformism, prefiguring a fundamental transformation of economic relations.

Despite the growth of insecurity, the **precariousness** of waged labour, the collapse of collective bases of solidarity and increased **individualisation**, the material conditions facing many workers, whether defined as working or middle class, holds out the possibility of forms of solidarity arising from precariousness. Thus for members of the **Precariat** forms of solidarity may also derive from practices surrounding social and cooperative production arising outside the workplace (see Peters 2013, 205-210; Standing 2011). Such a position would need to challenge the domestication of creativity, innovation and social production by interrogating these for their political implications. It is easy enough to celebrate empowering possibilities particularly when these can be presented as radical despite being amenable to capitalist co-optation. Arguments addressing WPL can readily provide a radical backdrop for analyses that discuss learning, creativity, innovation and the generation of knowledge outside and within the workplace. Yet such analyses can so easily become tied to no more than the development of labour power, that is to say, the skills and capacities of

the workforce which serve capitalist purposes. Such analyses at best offer a critique of neo-liberalism and its concerns with marketisation, consumerism and privatisation, calling for its replacement with a variant of social democracy. However, such a politics is doomed to failure. Whilst it might offer some amelioration of the harsher elements of current conditions, it would still be wedded to capitalism with all the tensions and contradictions entailed. It is salutary to recall the words of Ralph Miliband.

Social-democratic parties, or rather social-democratic leaders, have long ceased to suggest to anyone but their most credulous followers (and the more stupid among their opponents) that they were concerned in any sense whatever with the business of bringing about a socialist society. (Miliband 1973, 244)

Whilst this argument distances us from a discussion of competence it serves to raise questions about the way in which we make sense of the term in these new conditions. It also raises questions about the manner in which we understand knowledge and knowledge based economies (KBEs). There appears to be a tension between the discourse of cognitive capitalism and the relationship of waged labour in KBes to knowledge. Whilst both discourses centre knowledge, the work of Brown et al (2011) suggest that the notion of knowledge work has become over-blown in KBes, drawing our attention to the standardisation of this work as in digital Taylorism. In addition such processes sit alongside the salience of 'busy work' and precarious labour. The importance of knowledge work in cognitive capitalism points towards the mobilisation of social networks in the development of knowledge external to the firm which also aligns with aspects of the academic labour process. These processes work in tandem but for many workers the promise of KBes is very far from their lived experience of work, even though their waged labour will draw upon cognitive capacities this will be at some distance from the ideological representation of knowledge work in KBes. The mobilisation of cognitive skills can be seen in Beckett and Hagger's (2002, 48-54) study of carers working with those suffering from dementia. It can also be seen in Fuller *et al's* study of van drivers (2007, 749) and indeed Billett's (2008) study of hairdressers. These would all be cases in point with such labour being very different from the rhetorical representation of knowledge work in KBes. Keep and James capture the tenor of these representations when they write,

[A] 'knowledge-driven economy' that would usher in an era of unbridled creativity where a workforce of knowledge workers, would command 'authorship' over their own work routines and activities, would be created. (Keep and James 2012, 211)

Vocationalism, Vocational Pedagogy, Competence and Knowledge

Some versions of competence align this not only with the development of workplace knowledge and skill but also with the acquisition of appropriate dispositions, that is to say behavioural/social competences. In the latter case these softer skills can be linked to team building, problem solving and so on. The acquisition and engagement with knowledge can

be linked to the underpinning disciplinary knowledge that informs occupational practice. However, this can be construed as a broader process linked to the development of citizenship as well as a democratic engagement with wider society. The German system of VET and apprentice training has frequently been portrayed in this light - as being able to develop workplace skill and knowledge alongside citizenship that encourages democratic participation in wider society (see Coffield 2014, 4). It is important to acknowledge the neo-liberal socio-economic context in which this is set as well as the manner in which the German system is responding to change. Müller's (2014) analysis of school based processes has a resonance with Thelen and Busemeyer's (2011) discussion of VET and apprenticeship. Müller (2014) expresses concern over the direction of the German school system that he fears is becoming more focused on competence and learning outcomes. He is concerned that these developments are wedded to a restricted focus on competitiveness that serves to narrow schooling so that it addresses the needs of the economy. Müller suggests that in German policy and schooling debates competence carries with it three core meanings: an 'output orientation', 'the concept of predictability and governance' and 'the possibility of empirical evaluation and examination' (92). For him such processes lead to an anti-educative experience whereby,

What is aspired to is the training of skills and the transfer of stored knowledge, which are believed to be conducive to the preservation and expansion of individual and common prosperity as well as the prosperity of German business in a globalized world. (2014, 93)

In a not dissimilar vein Thelen and Busemeyer (2011) point to what they refer to as the shift from collectivism to segmentalism in German VET. In the former employers were encouraged to over train thereby producing workers with broad and portable occupational skills whereas in the latter training is organised around internal labour markets and the specific needs of the companies concerned (Thelen and Busemeyer 2011, 69). As with Müller, this leads to a truncated experience for trainees. Such processes are exacerbated by the development of a state sponsored 'transition system' designed to meet the demand for training amongst 'academically weak' youth. This fails to address the shortfall in apprenticeships or to provide the disciplinary engagement that formerly characterised German VET (Thelen and Busemeyer 2011, 90). Niemeier's (2010) case study exploring the re-framing of pre-vocational education in Germany illustrates this process where there is a focus on young people's attitude to waged labour. It is important to acknowledge that Germany, as with other European states, is set within a global economic system in which neo-liberalism is hegemonic. Brown et al. (2011) draw our attention to the logic of neo-liberalism - the necessity to reduce cost in order to remain competitive as well as the global sourcing of labour (124).

The notion of competence, vocationalism and vocational pedagogy cannot be thought of outside their specific institutional and national contexts. At the same time these notions are subject to temporal change shaped by the different economic circumstances facing national

states. A straightforward understanding of Vocational Education/pedagogy would simply refer to learning for work and developing the skills required to labour effectively. Notably, this a peculiarly Anglo Saxon conceptualisation of vocational education and pedagogy with Brockmann et al (2011) suggesting that VET is thought of quite differently in other social formations. Yet at the same time there are 'global' processes linked with neo-liberalism that encourage its technicisation and instrumentalism. For Wheelahan (2010) and other writers (Young 2009; Beck and Young 2005; Muller 2012; and Rata 2012) who adopt a **social realist** understanding of the curriculum, such processes undermine the salience and indeed value of vocational education and training. For these writers VET, at its best, offers young people access to powerful knowledge, epistemic gains not readily accessible in other forms of knowledge. Through VET young people will have access to disciplinary knowledge and consequently will be able to participate in societal conversations – this being an aspect of distributive justice (see Avis 2014). If young people encounter a truncated VET which is fragmented and instrumentalised so that it directly addresses the needs of capital, the potential of VET will be missed. At best VET and its pedagogy are much more than simply about work and in this instance will have to move well beyond instrumentalised conceptualisation of competence. In this way VET will be able to address the changing features of capitalism and enable learners to think beyond current conditions, address social justice and embody a politics of hope.

Towards a conclusion

Maybe we should rethink and move beyond the notion of competence, whilst resuscitating its progressive elements. It could be argued that competence has always been concerned with more than waged labour, yet at the same time it is a site of struggle, but one easily colonised by capital. Some writers suggest that the early development of the term was a response to the perceived failings of schooling and the irrelevance of much education to the requirements of waged labour. It is however important to acknowledge that the notions of competence and education are multifaceted and carry with them a range of contradictory meanings. Perhaps following Workerist analyses we could view the 'turn' to competence as a strategy to pacify the working class and as capital's response to worker resistance to Fordism.

In some respects the arguments surrounding cognitive capitalism and Italian Workerism can lead to a somewhat rarefied discussion rooted in various forms of neo-Marxism. These could represent an intellectual cul-de-sac, distanced from the lived experience of working and labouring in contemporary capitalism. These terms carry with them a diverse range of analyses accented in different ways which result in a degree of inconsistency. Yet the arguments that have been marshalled concerned with these approaches are significant in that they raise a number of important questions. For some writers' social production, co-configuration, mass customisation as well as the use of the internet to develop open source software and so on, carry progressive and democratic possibilities (Benkler 2006; Guile

2010; Engeström 2010). Theories of cognitive capitalism provide a corrective, illustrating the way in which capital seeks to appropriate and valorise such practices. Discussions of cognitive capitalism illustrate both the dynamism and the way in which capitalism constantly seeks to transform social relations. Despite the difficulties surrounding the notion of the 'refusal' of work, it nevertheless raises questions about the nature of work in capitalist societies as well as pointing towards different ways of organising social and political life. Importantly, the argument that much manual labour is unnecessary highlights contradictions surrounding the development of the forces of production, whereby existing social relations inhibit the full development of society. Whilst these analyses may be limited they serve to problematise approaches to WPL that seek to align this with a progressive politics tied to social justice commitments. For those of us who echo Cederström and Fleming's (2012) description of "dead man working, such analyses point towards the exaggerated significance attached to waged labour. For these reasons Workerist analyses make an important contribution to discussions of WPL, VET and force us to think beyond productivist conceptualisations of competence.

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