

METHODS FOR RESEARCHING THE SOCIAL PRODUCTION OF LABOUR POWER IN CAPITALISM

University College Northampton

School of Education

RESEARCH SEMINAR

7th March 2002

GLENN RIKOWSKI

The difference between Marxism and other theories of radical change is that Marxism takes negativity much further. It interprets the whole of society in terms of the force which negates this society, the power of labour. That is what makes it so powerful as a theory of revolutionary change. For Marxism the 'them' who dominate are not external to 'us' who are dominated. Capital is nothing other than alienated labour. The scream of Marxism is a promethean scream: we are everything, there are no gods, no superhuman forces. People are the sole creators, it is labour alone which constitutes social reality. *There is no external force, our own power is confronted by nothing but our own power, albeit in alienated form.* Money, that unfathomable god which rules our social world, is nothing but the alienated product of labour (John Holloway, "The Freeing of Marx" 1993, p.19 – original emphasis).

Introduction

The traditional Marxist educational theory flowing from the works of Samuel Bowles and Herbert Gintis (1976) and Paul Willis (1977) has to date been the springboard for generating educational research from a Marxist perspective. For example, Lucy Bailey (1995) explored the 1988 Education Reform Act in terms of Bowles and Gintis' "correspondence principle", whilst others have clearly been inspired by the work of Paul Willis in their research perspectives and practices (for example Stafford, 1981; Hollands, 1990; and Bates and Riseborough, 1993). However, I have indicated the flaws, shortcomings and debilitating aspects of 'traditional Marxist educational theory' and the research concerns and political strategies that it generates in a number of works (especially Rikowski, 1995, 1996a, 1997, and 2000b). Furthermore, I have gone beyond critique of traditional Marxist educational theory and started to develop a radical alternative in the form of 'labour-power theory' in a number of works (such as Rikowski, 1995, 1996a, 1997, 1999a, 2000a-e, and 2002a). Amongst these works, three are of particular significance, for me. First, *Education, Capital and the Transhuman* indicates how a Marxist educational theory can actually be grounded in the works of Marx – which the traditional Marxist educational theory and research were clearly not, on the analysis of Rikowski (1996a) and (1997). Secondly, *That Other Great Class of Commodities: Repositioning Marxist Educational Theory* – a paper to the British Educational Research Association Conference 2000 (Rikowski, 2000c) – indicated that it was *labour-power* (the capacity to labour) that was the most effective starting point for generating Marxist educational theory and

research. Thirdly, *Fuel for the Living Fire: Labour-Power!* (Rikowski, 2002a) explored this strange, living commodity – labour-power – that is at the heart of the Marxist educational theory and research I have been developing, in various ways, for the last 25 years.

Although this body of work is in its very early stages, it has generated reactions from the non-Marxist Left and from within Marxism itself. Elizabeth Atkinson (2001), from the postmodern Left, has critiqued my work as part of a project of criticism of Marxist educational work in general. From a critical realist perspective, Rob Willmott (2001) has attacked the ‘universal internal relations ontology’ (p.203, and pp.207-213) that he says I use in my work¹. At a recent presentation of my work as it relates to lifelong learning at the University of Leeds (Rikowski, 2001e), Rebecca O’Rourke criticised my work for being ‘reductionist’. That is, it was criticised for apparently reducing educational phenomena to economic ones on the basis of the base/superstructure model of traditional Marxism. This leads to a determinist form of Marxism. Yet in *Left Alone* (1996a) and *Scorched Earth* (1997) I have argued *against* both the base/superstructure model of societal development as foregrounded by some forms of historical materialism and a determinist, structuralist form of Marxism. Furthermore, the form of Marxism I actually operate with makes reductionism not just undesirable but *impossible*.² From within Marxism I have been criticised for daring to extend and revise some of Marx’s core concepts, for example, labour-power at a University of Greenwich presentation (Rikowski, 2000b) by Patrick Ainley and others. Some have queried the political implications of my work. Others have questioned its ‘abstract’ nature and argued that it fails to relate to education and training policy. This is despite the fact that I have written on such topics as lifelong learning, the learning society and Education Action Zones in a way that clearly connects with the theoretical work, for example, in some of my comments in Cole *et al* (2002a-b). Theory/policy links can also be witnessed in my work on apprenticeship (Rikowski 1996b-c, 1999b), my work on the World Trade Organisation’s education agenda (Rikowski, 2001b, 2002b-c), and also in my work on education/industry links (in Rikowski, 1990, 1992, and 2001a). Finally, others have indicated that it is hard to see how my work could have anything for educational research. Willmott (2001) argues that it is unlikely that my work could have purchase for educational research, as apparently institutions do not exist on my analysis (p.208). There is no room for educational research in schools and other educational institutions for me, if Willmott is correct.³ Rather than address all these charges here, I focus in this paper on the assertion that my work cannot generate any kind of research programme. I counter this charge by outlining some aspects of what such a research programme might look like.

This is part of a wider issue. One stereotype thrown at Marxist educational theorists is that ‘they don’t do research’. What this mostly boils down to is that they don’t do empirical research, fieldwork in the contemporary mode, though the contribution of Marxist historians of education (such as Brian Simon

and Andy Green) is clearly recognisable. Of course, one of the problems is getting funding to do research that not only wants to study existing society but also to change it. The Economic and Social Research Council is adamant that social science research is primarily concerned with bolstering UKPLC, and educational research is primarily about boosting the quality of human capital (Rikowski, 1996d) for a knowledge economy (Rikowski, 2001b). But the charge that Marxists don't mess with empirical research in the fieldwork mode is unsustainable too. Traditional Marxist educational theory developed out of two empirical studies, after all: *Schooling in Capitalist America* (Bowles and Gintis, 1976) that included surveys, and *Learning to Labour* (1977) that was based on ethnographic work that its imitators (with the possible exception of Shane Blackman, 1995) have since failed to match. The work of Phil Mizen (1995) Patrick Ainley (1994) and others attests to the fact that Marxists can and do undertake contemporary fieldwork studies. My own empirical research forms an important backdrop to my theoretical studies. For example, my research on apprenticeship in the early 1980s has been particularly significant for me (for more on this see Rikowski, 1990, 1992, 1996b-c, and 1999b). This was a study of the recruitment of engineering apprentices in 'Midtown'. The study focused on the criteria, methods and channels of recruitment. More recently, research on working students in the early- to mid-1990s and horological training has yielded further insights making for the development of my 'labour-power theory'.

These links between fieldwork research and theoretical development shall not be pursued further. The task in this paper is to generate aspects of a research programme based on my labour-power theory. The early sections (2 and 3) focus on the type of Marxist tradition I am working within and on why labour-power is so significant. The third section explores labour-power in more depth, so that the methods for researching its social production have a context and purpose. Section 4 outlines the strategic significance of education and training in capitalist society – thus giving greater urgency and political import to placing them centre stage for a project of social transformation. The fifth section outlines the social production of labour-power, some of its main elements and the institutions involved. Section 6 provides further essential definitions so that the methods for researching labour-power's social production can be appreciated and understood. The final section presents the methods themselves. The conclusion argues that such research methods will be suppressed, as their operationalisation would expose some of capital's undercover life and hidden effects.

The content of sections 1-6 ideally requires greater elaboration, which would make the paper even longer. Those skipping straight to the methods in section 7 may be disappointed without contextualising them within the theory as developed in sections 1-6. The methods should not be separated from the underpinning theory. They are not of the 'quick fix' variety. Furthermore, I am presenting these methods prematurely, when, ideally, the theory requires further development before such methods are to be outlined.

1. Marxism and Social Science

Many years ago, Martin Shaw (1975) argued that mainstream social science and Marxism are fundamental *alternatives*. The insights gained through research of the former are utilised – in myriad ways – to maintain and nurture capitalist society. On the other hand, the insights of Marxism are basically focused on transforming capitalist society, though as Shaw notes (p.vii) Marx held that real communist science was essential to achieving this world-transforming goal. Yet even Shaw talked about the ‘crisis’ of Marxism caused by the fragmentation of social knowledge into academic disciplines within the academy. Marxists were faced then, and still are today, with the task of reintegrating social knowledge for radical social change.

A decade later, Frank Richards (1986) was writing on the degeneration of Marxism as radicals were increasingly turning to post-Marxism, postmodernism and poststructuralism, and on how Marxism was undoing itself through impressionism. A further decade later, I indicated how these trends had impacted on Marxist educational theory and research (Rikowski, 1996a, 1997). In particular, I noted how ‘academic Marxism’ had severed the essential links between theory and practice, and had split up Marxism throughout the academic disciplines, thus mirroring (not challenging) the constitution of capitalist social reality (Rikowski, 1996a). As John Holloway has noted:

Capital lives by breaking the totality of our existence into apparently timeless, unhistorical fragments. An understanding of the movement for socialism presupposes establishing the unity of those fragments as an historically specific and transitory form of domination. (Holloway, 1991, p.233)

Academic Marxism (with some exceptions) largely acts to reproduce this fragmentation. Holloway advocates a return to Marx as an antidote to the virus of academic Marxism. However, he realises that this is easier said than attained, as:

...when I use Marxist categories now [as opposed to the late 1960s], I often have the impression that I am speaking Latin, that I am speaking an ancient language that few people understand, a language that may soon be dead. There is no longer the same education in this language as there was ten or fifteen years ago: there are no longer so many people reading *Capital*, for example, which is so basic to the understanding of the Marxist language. And whatever we think of the disintegration of the Soviet Union, we have to recognise that for many people it implies also the disintegration of Marxist theory. There exists a real possibility that Marxism could die out as a form of expression, just as happened to Latin. (Holloway, 1994, p.38)

However, in a series of works Holloway (1993, 1994, 1995, 1996) convincingly argues for the relevance of Marxism for our time. Its relevance rests on working within a particular conception of Marxism, argues Holloway. He provides three theses (Holloway, 1994) that indicate what is at stake in the form of Marxism he is advocating, and the type of approach informing this paper. Holloway’s first thesis is as follows:

My first thesis is that Marxism is not a theory of society, but a theory against society, and to judge its relevance today it has to be seen in this light (Holloway, 1994, p.38).

Thus, Marxism is not primarily in the business of supplying a better economics, a better sociology, or even ideas that constitute a superior social science, but is mainly concerned with two things, according to Holloway. First, it is about providing a *critique* of the bourgeois social sciences (including the variegated discipline of education and educational theory and research). After all, Marx claimed that he had provided a *critique* of political economy, as the most condensed form of bourgeois social thought, not a better political economy. The subtitle to his great work, *Capital* was 'a critique of political economy'. Secondly, as a theory *against* society Marxism is concerned with locating the *weak points* of the rule of capital. Thus, in this sense Marxism is a theory *against* mainstream social science too. As Martin Shaw (1975) indicated a quarter of a century ago, mainstream social science is heavily implicated in the maintenance and development of capitalist society in general and national capital and individual capitals (specific enterprises) in particular. I have indicated how education research is increasingly framed by the priorities of the Department for Education and Skills and the national obsession (which surfaces in all recent education reports) with human capital development. Human capital enhancement is the centrifugal force of New Labour's education policy (see Rikowski, 2000d). Alex Nunn (2002a-b) has indicated how higher education and business interests are becoming increasingly intertwined in the UK, especially in research partnerships.

John Holloway's second thesis regarding the continuing relevance of Marxism for human liberation is that:

...Marxism is not a theory of capitalist oppression but of the contradictions of that oppression. This gives Marxism a special relevance for any person or movement interested in a radical transformation of society (Holloway, 1994, p.40).

Thus, Marxism articulates the contradictory positions and situations that individuals and groups engaged in struggle against oppression in capitalist society find themselves in, and also how individual representatives and organisations supportive of capital's domination of our lives are subject to social contradictions in instituting oppressive social relations. The poison works both ways. Everyday life in capitalist society is contradiction-ridden, and Marxism brings these contradictions to the fore and explores their origins and effects for everyday social existence, for everyday life, as well as for anti-capitalist struggles. These contradictions of capitalist social existence screw us up, individually and collectively. They foreclose any 'rational' solutions. Furthermore, these contradictions guarantee an *openness* to capital's social universe, as oppressed individuals and groups are engaged in an endless quest for solutions to social problems, tensions and inequalities generated by capitalist development, with the *possibility* of the termination of capital's rule ever-present. This is a form of Marxism that has been characterised as Open Marxism, and the writings of Werner Bonefeld (1992, 1994, and 1995) and

John Holloway (1991, 1992, 1993, 1994, 1995, and 1996) have developed this tradition of Marxism for many years now. The 'openness' involved also pertains to the substance of the type of Marxist theory generated too, as it must if theory is to grasp the contradictory nature of capitalist social existence. As Michael Neary and Graham Taylor have argued, Open Marxism is:

...an 'open' critique in the sense that it recognises the closed nature of the theoretical world of liberal social science, whilst refusing to accept that social theory has managed to completely enclose that world... [...] ...The 'open' account does not reduce this closed world and its explanations to the status of illusions or 'false consciousness', but undertakes to understand and explain the 'thingness' of the thing-like world – a world that is dominated by things and the science of things (liberal social science and orthodox Marxism). This 'open' account recognises the *dialectical* relationship between open and closed, thing and process, content and form, including the practice of theory and the theorising of practice. (1998, p.6)

For Neary and Taylor (1998), liberal social science, Marxist social science and orthodox or traditional Marxism⁴ are essentially abstract and speculative as they reflect the 'abstract and speculative world' they attempt to explain (*ibid.*). Open Marxism, argue Neary and Taylor, does not accept the world in the abstract or in a speculative mode of thought. Thus, the account of social life provided through Open Marxism,

...is not an abstract or speculative theory, but a theory of abstraction and speculation. There is a real world that can be known (Neary and Taylor, 1998, p.6).

Furthermore, the critique of social life generated by an Open Marxism as developed by Bonefeld and Holloway is an *immanent* one. There is no externality to the account. That is, explorations of institutions, the state, money, law and any aspect of "everyday life" yield up forms of sociability which are simultaneously *in and against institutionalised forms of capitalist power*, according to Neary and Taylor (*ibid.*). Such an account uncovers the contradictions within "everyday life" whose possible solutions point *beyond* the form of life inherent in capitalist society.

For Neary and Taylor, Open Marxism constitutes a theoretical advance on liberal social science and traditional Marxism. This is because it:

...explains that which is assumed by liberal social science – the separation between political, economic and ideological aspects of social reality. It overcomes the crude economic reductionism of orthodox Marxism where the 'economy' is the foundation of all social life – either permanently or in the 'last instance'. It undermines the structural functionalism of bourgeois sociology and it provides a material basis for the power of modern society (1998, p.7).

In this account, education is a *form* of production, the economy a *social form of learning*. Social form analysis re-integrates social life in order to explain the forces driving its elements apart. This is the basis of communist science, as the moment of bringing the diverse and fragmented back into a unity opens up possibilities for uncovering possibilities for a form of social life that is

suppressed in capitalist society and in mainstream social theory and research that maps it: *communism*.

Holloway's third thesis is that *the fragility of capitalism is the expression of the power of labour* (1994, p.40). For Holloway, this thesis expresses the fact that in capitalist society the contradictions of capital are not separate from class struggle. He argues that one of the defining characteristics of traditional Marxism is this separation is inscribed within its theory. On the one hand there are the contradictions of capital, the contradiction between use- and exchange-value, between the interests of the bourgeoisie based on surplus value extraction and those of the working class which focus on raising the value of labour-power and enhancing working conditions, and so on. On the other hand, there are accounts of concrete class struggles – strikes, protests, campaigns and so on – against the depredations of capitalist development on workers' well being, dignity and standards of life. This separation engenders an account of the "objective" laws of capitalist development, on the one hand (providing the framework for class struggle), and accounts of class struggle framed in terms of these "objective" conditions. The problem with this, for Holloway, is that:

...this approach implies a theoretical and often practical subordination of struggle to the objective conditions, and therefore an undermining of the power of labour in the struggle against capital (Holloway, 1994, p.40).

However, for Holloway, labour is the *only constitutive power*, and capital is dependent on labour whilst labour has the possibility of being independent of capital, in non-capitalist societies. These facts about labour in capitalism indicate that the contradictory reality of labour – it is in, and yet against, capital – means that labour is divided against itself. As labour, we are always in the process of being subordinated to capital yet always kicking against the traces, resisting being dominated by the social force (capital) that we, through our labour, have created.

In general terms, this paper embraces an Open Marxism as exemplified by Holloway above. Yet in the last five years writers such as Ana Dinerstein, Michael Neary, Graham Taylor and myself have moved beyond Open Marxism in a number of respects.⁵ The thrust of this work has been to drive Marx on to his most radical conclusions, and furthermore, to push the notion of *no externality* to its logical conclusion. This second point involves the incorporation of the 'human' into capital's social universe. As its creators, we do not stand outside our creation. But this implies that labour is constituted as capital, and that furthermore, as a life form, we are a form of capital too (human capital). We are capital and we are labour. We are socially constituted as a living contradiction, an entity at war with itself. On this analysis, the class struggle – between capital and labour – is internal to the 'human', internal to our personhoods. This analysis breaks into the final frontier: our 'selves'. It is not strictly true to say that labour is the only social power, as this separates labour and capital in a way that distorts the radical internality of their historic

struggle. Capital is the *dominating social power* – even though, as Holloway rightly argues, it is dependent on labour for its own existence (Neary, 1997; Postone, 1996). But this is the *tragedy of labour*, and the tragedy of our social existence (Rikowski, in McLaren and Rikowski, 2001; Rikowski, 2002a).

2. Capital's Weakest Link

One of the key points regarding the form of Marxism advanced above is that it attempts to locate the *weak points* within capital's domination of social life. This section uncovers *capital's weakest link*: labour-power. This analysis exposes the significance of education and training in contemporary capitalist society.

Capitalist social life can be viewed as constituting a veritable *social universe* (Postone, 1996, p.143 and p.259). The substance of this social universe is value, and it is surplus value produced by labour not represented in the wage that allows capital's social universe to expand. Surplus value can be viewed as a kind of social energy that powers and sustains capitalist social life *in toto*. As Ana Dinerstein has noted, as in physics, this social energy 'is permanently being transformed' and created (1997, p.83). Secondly, historically, over time capital not only expands spatially (globalisation) through all forms of labour being turned into the *value-form* (value creating labour), but deepens its intensity within its own domain (e.g. the privatisation and business takeover of public services and industries – that is proceeding at a frantic pace today).

The creation of value and surplus value is dependent on labourers – producing material or immaterial commodities – expending their personal capacities, their capacity to labour (labour-power) within the labour process. In the first instance, labour is incorporated in commodities in the form of value, and then, at a certain point, once value equal to the value of labour-power arises, then surplus value is produced. Surplus value is the *lifeblood* and first form of existence of capital. Surplus value is then transformed into capital's myriad social forms: rent, state, money etc. and especially *profit* – that portion of value left over after all other deductions.

The key to this process is the *transformation of our powers and capacities – our labour-powers – into labour*. However, these capacities and powers reside within the personhood of the labourer; they flow throughout our personhoods (Rikowski, 1999a, 2002a). This is the challenge that the generation of capital (in its first form as surplus value) faces: its existence is based on this transformation. The labour-power of the labourer is under the sway of a potentially hostile will, a will that also exists *against capital* as well as within it. The labourers also have the capacity to use their precious commodity in *non-capitalist productive forms* as labour *beyond capital*, which is capitalist dredd.

This exposes the fragility of capital's social universe. On a daily basis, the transformation of our labour-powers into labour in the labour process must take place for value and surplus value creation. Capital is dependent on us in this way. Labour-power is therefore *capital's weakest link*, for the single, living commodity that the whole capitalist system depends upon for its existence *is within us*.

Now, education and training play significant role in the *social production of labour-power*. Their significance in this respect has increased, and is rapidly increasing, historically. Education and training are increasingly being subjected to processes of reduction to labour-power production, or human capital production – human capital being the social form assumed by labour-power in capitalist society (Rikowski, 1999a, 2000e, and 2002a). But before we explore the strategic significance of education and training as two of the key developers of the unique commodity that powers capitalist social life (labour-power), the following sections examines this strange, living commodity in more depth.

3. The Commodity in a Class of its Own: Labour-Power – Definition, Aspects, Attributes

What is well known is that Karl Marx begins his great work *Capital* (Marx, 1867a) with the observation that:

The wealth of those societies in which the capitalist mode of production prevails, presents itself as “an immense accumulation of commodities,” its unit being a single commodity. Our investigation must therefore begin with the analysis of the commodity (Marx, 1867a, p.43).

Thus, Marx does not start out in *Capital* by exploring capital, but begins with an examination of the commodity. For Marx, the analysis of capitalist society begins with the commodity as it is the ‘economic sell-form’ (Marx, 1867b, p.19) of that society. It is the most simple and basic form that can enlighten us about more complex social phenomena springing from it, much in the same way that human DNA provides significant data on the more complex features of humans in general and particular individuals. Moreover, value is not something that can be directly observed. Thus:

In the analysis of economic forms ... neither microscopes nor chemical reagents are of use. The force of abstraction must replace both. ... [And to] ... the superficial observer, the analysis of these forms seems to turn upon minutiae. It does in fact deal with minutiae, but they are of the same order as those dealt with in microscopic anatomy (Marx, 1867b, p.19).

The commodity was the perfect starting point for Marx as it also incorporated the basic structuring elements of capitalist society: value, use-value and exchange-value posited on the basis of abstract labour as measured by labour-time (Postone, 1996, pp.127-128). It was the condensed ‘general form of the product’ in capitalist society (*ibid.*, p.148), the ‘most elementary form of

bourgeois wealth' (Marx, 1863, p.173), and hence the 'formation and premise of capitalist production' (Marx, 1866, p.1004). Commodities were also 'the first result of the immediate process of capitalist production, its product' (Marx, 1866, p.974).

In *Theories of Surplus Value – Part One* (Marx, 1863), Marx makes it clear that there are *two* classes or categories of commodities within the social universe of capital:

The whole world of "commodities" can be divided into two great parts. First, labour power; second, commodities as distinct from labour power itself. (Marx, 1863, p.167)

Labour-power is the unique commodity; the only commodity whose use-value is that it creates more value – surplus value – than is incorporated in its maintenance as a commodity. It is the one commodity that enables the expansion of the world of commodities, of capital.

Definition

Labour-power was defined earlier in this paper simply as the 'capacity to labour'. Marx has a formal definition of labour-power that is very interesting. This is that labour-power is:

...the aggregate of those mental and physical capabilities existing in a human being, which he exercises whenever he produces a use-value of any description (Marx, 1867a, p.164).

On this definition, labour-power has real social existence when it is transformed within the labour process into actual labour. It has a dual mode of social existence. On the one hand, labour-power exists as a virtual entity (a capacity, a potential) within the labour market, or to be more accurate, the market in labour-power (McNally, 1993). On the other hand, in the capitalist labour process, labour-power has *real* social existence; labourers call forth and activate an array of capacities, attributes and capabilities within their personhoods as they set about the *process* of labour. Hence:

Labour itself, in its immediate being, in its living existence, cannot be directly conceived as a commodity, but only labour power, of which labour itself is the *temporary* manifestation (Marx, 1863, p.171 – my emphasis).

A key question is what is included in 'mental capabilities' in Marx's seminal definition of labour-power above. The usual suspects – skills and forms of knowledge – are not typically viewed as being controversial. However, in a series of papers and articles (Rikowski, 1990, 1995, 1999, 2000b-c and 2000e) I have argued that personality traits and attitudes (work and social attitudes) and other aspects of the person should be included, on a number of grounds. The justification for extending and radicalising Marx's formal definition of labour-power has been expounded substantially elsewhere (e.g. Rikowski, 1990, 2000c-d, and 2001c). Basically, the key point is that the labourer *decides* to subsume her capacity to labour under capital expansion as expressed in

her actual labour in the labour process. Furthermore, the relative willingness with which the labourer does this, the degree of motivation and positive attitude to work have significant consequences for the amount of work s/he produces, and also the quality of the work. Poor quality products or useless products will not realise their values in the market, as consumers will shun them eventually in favour of equivalent products from other enterprises. Thus, in recruitment studies it is no surprise that employers generally pinpoint work attitudes as the most significant group of recruitment criteria, followed closely by personality traits (Rikowski, 1990, 1992). This is because they have an intimate connection with, and are incorporated within labourers' labour-power to varying degrees.

Aspects of Labour-Power

Although labour-power is a unified social force flowing *throughout* the personhood of the labourer its incorporates a number of *aspects*. These are modes of expression of labour-power, not different forms of labour-power. The analysis of labour-power aspects presented here draws heavily from my article *Fuel for the Living Fire: Labour-Power!* (Rikowski, 2002a).

Although it is a unified social force, labour-power is nevertheless a highly contradictory phenomenon. Furthermore, as labour-power cannot be separated from the 'bodyliness of the worker' (Marx, 1858) then these contradictions become incorporated within personhood itself. We are 'screwed up' *by capital*. The contradictions inherent within labour-power flow from the existence of capital as a mode of being within labour, or labour in capital; what I have called *aspects* of labour-power (Rikowski, 1990). By 'aspects', I do not mean that labour-power is composed of different 'parts'. Furthermore, to split it up into 'parts' or 'bits' would reify these as discrete elements of labour-power, destroying its characterisation as a *unified* social force flowing throughout personhood. Rather, these aspects can best be viewed as *different modes of expression* of this self-same unified social force: labour-power. In this section, three labour-power aspects that are expressed as *capital within labour* are presented: the use-value, exchange-value and value aspects of labour. Three labour-power aspects expressed as *labour within capital* are presented: the concrete, subjective and collective aspects of labour-power. The first three exist as modes of labour-power expression flowing from aspects of value. The other two exist as modes of labour-power expression flowing from the alienated existence of labour within capitalist social life, and specifically within the labour process.

This discussion of these labour-power aspects begins from Marx's important distinction between 'quantity and quality'. It was misreading this distinction that led me to confuse and conflate exchange-value and value over 10 years ago in Rikowski (1990). This confusion was partly a result of following Cressey and MacInnes's (1980) distinction between use-value and exchange-

value aspects of *labour*, where their rendering of use/exchange-value confused the latter with value. So: to begin with Marx on quality/quantity.

On the first page of *Capital – Volume 1*, Marx (1867a) asserts that: ‘Every useful thing, as iron, paper, &c., may be looked at the two points of view of quality and quantity’ (p.43). A thing’s utility constitutes its use-value. Use-values have the property of “usefulness” ‘independent of the amount of labour required to appropriate its useful qualities’ (Marx, 1867a, p44). In capitalist society, notes Marx, use-values are also ‘depositories of exchange-value’ which ‘at *first sight* presents itself as a quantitative relation, as the proportion in which values in use of one sort are exchanged for those of another sort’ (*ibid.* – my emphasis). However, commodities can only exchange with each other on the basis of something they have in common. Marx argues that their commonality is socially average labour-power (that yields homogenous human labour). It is this form of labour, abstract labour, that is the social substance of *value*, and it is value that inheres in all commodities in capitalist society on the basis of this equality of labour-powers (and hence of labours). Therefore:

...the common substance that manifests itself in the exchange-value of commodities, whenever they are exchanged is their value. ... [And] ... exchange-value is the only form in which the value of commodities can manifest itself or be expressed (Marx, 1867a, p.46).

On this basis, a commodity has value ‘only because human labour in the *abstract*’ (as the labour of socially average labour-power yielding homogenous labour) ‘has been embodied or materialised in it’ (*ibid.*). The magnitude of value within commodities is measured by the quantity of this labour expressed through socially average labour-power. This quantity is measured by its duration, the labour-time (on the basis of socially average labour-power) it takes to produce the commodity. Thus:

The labour-time socially necessary is that required to produce an article under the normal conditions of production, and with the average degree of skill and intensity prevalent at the time ... We then see that that which determines the magnitude of the value of any article is the amount of labour socially necessary, or the labour-time socially necessary for its production. Each individual commodity, in this connexion, is to be considered as an average sample of its class (Marx, 1867a, p.47).

The value of a commodity changes on the basis of the socially necessary labour-time it takes to produce it. It changes with the ‘productiveness of labour’ (*ibid.*) and this in turn is determined by:

... various circumstances, amongst others, by the *average amount of skill of the workmen*, the state of science, and the degree of its practical application, the social organisation of production, the extent and capabilities of the means of production, and by physical conditions (Marx, 1867a, p.47 – my emphasis).

The quantitative aspect of labour is set by the following considerations:

In general, the greater the productiveness of labour, the less is the labour-time required for the production in that article, the less is the amount of labour

crystallised in that article, and the less is its value; and *vice versa*, the less the productiveness of labour, the greater is the labour-time required for the production of an article, and the greater its value. The value of a commodity, therefore, varies directly as the quantity, and inversely as the productiveness, of the labour incorporated in it (Marx, 1867a, p.48).

If a capitalist enterprise produces a commodity at a value below the average for its class (by raising labour productivity) it can, for a while, sell it below its value and easily clear its products in the market place. That is until other enterprises start to adopt the new technology or new training programme, and then a value for the product is established on this basis. This summarises the *quantitative* aspect of labour: the social drive to produce commodities at a value below the social average for their class. On the other hand, the qualitative aspect is significant in terms of realising value produced. For:

If the thing is useless, so is the labour contained in it; the labour does not count as labour, and therefore *creates no value*. (*ibid.*)

As Marx notes in the *Grundrisse*:

Use value is concerned only with the *quality* of labour already objectified. (1858, p.363)

Marx argues that labour (like commodities) *also* has a dual character, a two-fold nature: use-value (its qualitative aspect) and value (its quantitative aspect) (Marx, 1867a, pp.48-49). This establishes two *aspects of labour*: the use-value and value aspects.

However, I wish to maintain that there must also be quantitative and qualitative aspects of *labour-power* too: the use-value aspect (qualitative) and the value aspect (quantitative) of labour-power. This must be so, as there are two modes of expression (of transformation into labour) of labour-power for the generation of these two aspects of labour. Labour-power must be adequate to the point of expressing itself in these two ways. Furthermore, when it does this simultaneously the labourer experiences a *contradiction* within her concrete existence. When labourers have regard to the quantity and quality of their work, then a tension, an irresolvable conflict is set in motion. Whether to spend labour-time on a commodity's quality or to spend less labour-time on it (thereby raising productivity): in this way the worker is faced with a banal, everyday contradiction in working life. Managers of labour-power are subject to this too, both in terms of the transformation of their own labour-powers into labour and in terms of managing the labour-powers of others.

In the social production of labour-power, therefore, the various labour-power attributes – the itemised constituents of labour-power, the skills, attitudes and so on – also have this contradiction flowing through them. Thus: it could be expected that in schooling and training in contemporary capitalist society, where raising the quality of labour-power has become increasingly favoured as a strategy for increasing labour productivity, this duality could be

demonstrated. Furthermore, the same duality would run through the labours and labour-powers of teachers and trainers.

Finally, the exchange-value aspect of labour also carries with it an exchange-value aspect of labour-power. This establishes the *equality* of labour, of labour-powers and the equal social worth of labourers. On the basis of exchange-value our labour is equal (Rikowski, 2000a). This is the only form of equality recognised, or socially validated, in the social universe of capital. This form of equality has nothing to do with 'morality', for capital is 'without ego' (Postone, 1996). Furthermore, we are of equal 'worth' only if our labour-powers are of equal value. Again, this has nothing to do with ethics. An argument could be advanced that social justice can only be equality of labour-power values: labour-powers that have the capacity to produce value to equal degrees on standard labour-time, implying equality of development on the basis of education and training. This was argued in Rikowski (2000a). But on reflection it is difficult to see in what sense this could be something that we ought to strive for without introducing moral values that have no currency within the social universe of capital (like all *other* values).

Next, there are the three aspects of labour-power deriving from labour's existence in capital. The optimum starting point is with the *concrete* aspect of labour power, as its characteristics can be brought out most productively in relation to the previous, exchange-value aspect of labour-power. This is the differentiating aspect of labour-power that is tied to the specifics of workers' labour-power qualities and attributes and the concrete expression of these in particular labour processes. It acknowledges that labour-powers are different at the concrete level; so 'we're all individuals' and 'everyone is different' as labour-power. This outlook on labour-power comes to the fore especially within the recruitment process (Rikowski, 1990, 1992) when employers must necessarily discriminate on labour-power quality (there being a necessary relation between the use-value and concrete aspects of labour-power at this point). It is also clear that this differentiating aspect runs counter to the exchange-value aspect of labour-power. Thus: workers are intrinsically equal and the same, and also unequal and different as labour-powers. We live this contradiction.

The subjective aspect of labour-power is labour-power in its individual and *will-determined* moment. Labour is the subjective element in the labour process. Its expression, the transformation of the labourer's labour-power into labour, depends upon the labourer's activation of her labour-power. This active moment (i.e. 'which he exercises') is built into Marx's formal definition of labour-power provided earlier. Cressey and MacInnes (1980) noted correctly that Marx makes the human will a defining characteristic of all human use-value creating labour. The attributes, or 'powers' (as Chris Arthur calls them) that constitute the labourer's labour-power:

... can only be externalised if they are objectified in production, and this latter requires, not the exclusion of ... [the labourer's] ... will but the use of ... [her/his] ... powers, however grudgingly (Arthur, 1980, p.12)

Insofar as the will of the labourer is subordinated to the purposes, desires and ends of capital and its human representatives then it is incorporated within labour-power itself as it expresses itself in production through acts of labour. To the extent that this occurs, the labourer *becomes* capital. On this basis, the statement 'I am capital' has social validity (Neary and Taylor, 1998, p.128). This subordination is never complete; the will of the labourer is capricious and subject to the contradictory aspects of labour-power (and hence personhood itself) now under consideration. The fact that in capitalism workers do not own the means of production forces them to submit to the dictatorship of capital in the labour process. As Marx notes, because of this, the labourer 'activates his life to acquire the means of life' (1844, p.269).

The collective aspect of labour-power reflects the fact that in capitalist society labour-powers are co-ordinated (through co-operation and division of labour). Thus, labour-power can be viewed through its *collective* aspect, as 'an accumulation of labour-powers' (Marx, 1858, p.585). This is where the *quality* of co-operation between labour-powers is brought to the fore. Such co-operation forms a significant collective force within the labour process, a force that capital and its representatives seek to control and channel into the value-form of labour, into value creation. The collective aspect of labour-power can be viewed as an agglomeration and amalgamation of the individual labour-powers of workers set in motion for capital. As Marx noted, this...

...collective power of labour, its character as a social force, is therefore the collective power of capital (1858, p.585).

Hohn (1988) has explored the collective aspect of labour-power (though he doesn't call it that) to explain the social exclusion of some ethnic groups from the workplace on the basis that the quality of the aggregated labour-powers falls if the workgroup is less homogenous. Thus: this constitutes a starting point for a materialist explanation of some forms of racism in the labour market and the labour process.

What has been indicated thus far is that labour-power is a complex phenomenon with inherent contradictions and tensions that become incorporated within personhood – given labour-power's fusion with the person of the labourer. To bring out the full complexity of these contradictions between labour-power aspects, empirical and historical studies illustrating these would be required – a project not pursued here. However, as well as these diverse aspects of the unified social force that is labour-power, there is a deeper rift that de-stabilises labour-power and the person within which its force flows.

Labour-power, which takes the form of human capital, is at odds with the person (*de facto* with itself) as not-labour-power; the person with interests, desires, motives (with dreams even) that run counter to the subsumption of

the self as labour-power. The antagonistic labour-capital relation is a *relation within personhood* too in capitalist society. Our existence as *labour against capital* (as opposed to labour within and as capital) places a limit on the capitalisation of our souls, the capitalisation of humanity through the phenomenon of labour-power.

Labour-power Attributes, and Necessary Reification

Moving towards the 'concrete and diverse' qualities of labour-power, the next element in a comprehensive portrayal of labour-power is labour-power *attributes*. Labour-power attributes can be viewed as the *itemised constituents* of labour-power, and these manifest themselves as the lists of skills, qualities, knowledges, personal and social attitudes, personality traits and physical qualities that are sought by employers in potential labourers in the recruitment process. They are the 'bits' and individual capacities and capabilities that constitute labour-power. However, as labour-power is a unified social force when set in motion by the will of the labourer, then a *necessary reification* is involved when itemising labour-power attributes. Practically, this process of necessary reification goes on when employers enumerate what they are looking for in recruits and set the applicants against these standards by searching – in interviews, job tests and other means – for the extent to which applicants possess the desired characteristics.

Furthermore, there is no clear demarcation within human beings between the labour-power attributes and other attributes of the person. Thus Brown's (1987, p.125) comment that 'it is the personality package that must be sold in the market place' takes on added significance in that the capitalist takes on the whole 'personality package' in the recruitment process but is ultimately interested in only some of the contents. This difference between the person as a set of inter-related attributes and qualities, and labour-power as distinguishable from but part of the person, is fundamental to the way in which surplus labour-time is created and the surplus product appropriated. It is crucial to understanding the specific form of capitalist exploitation, as Marx (1867a) indicates. Certain attributes of the person only become *labour-power attributes under the definite social conditions of the capitalist labour process*. In sum, labour-power attributes are the competencies, abilities, physical and other qualities relevant to the *performance of labour in the labour process*. There are three dimensions to this.

First, there are attributes of the person that become actualised within the labour process itself. They are utilised in production. This has two elements: those attributes relating to the task, the immediate job itself; and those relating to the labour process as a whole – the division of labour, the forms of worker co-operation and management control regimes, internal recruitment systems and retraining systems.

Secondly, there are the attributes of labour-power that capital and its agents deliberately attempt to socially produce – the attributes of labour-power as incorporated within it, and developed to varying levels of quality through the *social production of labour-power*. These relate especially to the practical education and training elements in the social production of labour power (of which more later). They are regulated by the attributes perceived to be relevant to the performance of labour in the labour process. These perceptions are dependent in turn on the degree of *knowledge* of the attributes necessary for effective labour performance held by recruiters, trainers and line managers (Rikowski, 2001a). There may be a great gulf between this second and the first consideration; labour-power may be over- or under-produced in relation to the *range* of attributes relevant to the effective utilisation of labour-power in production. In terms of *quality* of labour-power attributes there is no logical ceiling, and the drive to enhance labour-power quality – overall and in terms of specific labour-power aspects and attributes – is *infinite* (see Rikowski, 2000d for more on this). The quest for quality in labour-power (in *toto*, aspects and attributes) is expressed and experienced as an *infinite social drive*.

Thirdly, labour-power attributes can be specified, defined and assessed by recruiters of labour-power. The subjective dimension is more in evidence here. Nevertheless, the specifications and definitions of the attributes sought in applicants for jobs are conditioned and regulated, to varying degrees, by the specific job in question and the employer's perception of the skills and other labour-power attributes involved, and the wider aspects of the labour process environment as outlined above. The relevant attributes here flow from the labour process, rather than being strictly *determined* by it (yielding a functionalist relation), as they depend on the recruiter of labour-power's *judgement* of what these relevant attributes are. Wood (1988) found that recruiters do not look for personality traits *per se*, but the personality traits they believe are linked to effective production.

There is room for variance between the specification of attributes by the recruiter and the attributes actually utilised in production. Such difference is expected. Research into recruiters' strategies by Stephen Wood (1986) found a marked reluctance amongst the personnel managers he studied to use job descriptions in recruitment. They tended to 'carry knowledge of jobs in their heads' (Wood, 1986, p.106). Approximation was acceptable. Labour-power attributes are assessed as attributes within the applicants for jobs as attributes *already socially produced*, and as those that appear to be lacking and hence requiring social production. The *quality* of the specified attributes is also assessed. Recruiters do not think in terms of labour-power attributes, but concretely in terms of the sort of person they want and what they look for in applicants. Attributes sought in recruitment reflect these concerns. Yet in defining, practically, and assessing attributes sought in applicants in recruitment employers are involved, to varying degrees, in the *specification and assessment of labour-power attributes*.

Labour-power attributes are firstly the itemised constituents, or bits' of labour-power. From the recruitment perspective, they have a contingent relationship with the labour process because, although they are regulated by it, conditioned by it, their perceived relevance ultimately rests on the judgement of the labour-power recruiter. Furthermore, labour-power attributes can be perspectivised through the various labour-power *aspects* as outlined in the previous sub-section. This can place them in contradictory relations with each other to the extent that the aspects are in contradiction. This rules out any ideal and absolute definitions of the required attributes from the perspective of labour-power recruiters. There can be no ideal labour process, ideal labour-power or labourers. Stating what attributes of labour-power are required involves bringing in aspects of labour-power that are *in contradiction*.

It is THIS commodity...

Labour-power: it is this complex, contradictory and *living* commodity that schools and training organisations are in the business of socially producing, and it is this process of production that leads us to characterise education and training organisations and institutions today as being decisively capitalist in nature. This social production occurs on the basis of the labour-powers of the producers also being subject to contradictions and tensions flowing from the nature of labour-power. Before outlining the social production of labour-power in capitalism, the next section uncovers the strategic significance of education and training in capitalist society.

4. The Strategic Significance of Education and Training⁶

The substance of capital's social universe is value. Labour-power produces value, and education and training in capitalist society are heavily implicated in the social production of labour-power: the commodity that generates the social universe of capital. Furthermore, labour-power is capital's weakest link, as it resides within us, within our personhoods, and is hence subject to our wills. Hence, education and training in capitalist society have massive *strategic significance* for the maintenance and expansion of capital. It is on this point that the social power of teachers, trainers and education researchers – educators in the broadest sense – rests.

Of course, governments instinctively sense this, even though they do not articulate it in this manner. On the back of these instincts, they attempt to control and regulate the labour of teachers and education researchers on the basis of three main social drives. First, to ensure that education and training are constituted as forms of human capital production, for international competitiveness within a globalising economy - to sustain and augment the national capital. Second, to contain education and training as sustainers of the

value-form of labour, which simultaneously hampers alternative forms of labour-power development. Third, to narrow the social space for the development of critical perspectives on the constitution of capitalist society and the development of alternatives: to erase 'critical space'.

On these grounds, teachers are 'dangerous workers': they develop and nurture the social force (labour-power) that powers and maintains capitalist society. They are like 'angels of the fuel dump' (labour-power being 'fuel for the living fire' of labour), or 'guardians of the flame'. If you want to be at the cutting edge of the class struggle there are no better places to be than in education and training in contemporary capitalism! Thus, the control of teachers' labour on these grounds appears as an iron necessity. These points could be empirically related to regulation, assessment, targeting, standards and inspection regimes within all sectors of education. On this basis, the Office for Standards in Education (Ofsted) would never look the same again!

Radical educators, inspired and armed with Marxist educational theory can blow the lid off this can of worms – both practically (as practitioners), as political actors and theoreticians of labour-power (labour-power theory). Their significance arises from their understanding that education and training in contemporary society are subject to processes that reduce them to labour-power production.

Most of the necessary distinctions and arguments have now been made in terms of grasping the nature and significance of labour-power, education and training and teachers' labour in capitalist society. The following section outlines briefly the social production of labour-power.

5. The Social Production of Labour-Power in Capitalism

The social production of labour-power refers to a process that is highly fragmented in capitalist society. Today, it typically includes compulsory education. However, it can include training (on- and off-the-job), various forms of personal development programmes, further and higher education, computer-based training and many other elements. It also develops through labour itself, "spontaneously", within the labour process (Marx, 1863, p.167). This last is labour-power's "automatic" production, though various 'learning company' strategies are attempts to formalise this.

Empirically, therefore, concrete forms of labour-power production can be very complex. A study of the engineering industry I undertook in Coventry in the early-1980s threw up a range of concrete forms of labour-power production. There are also general, abstract and elementary forms of labour-power production that invariably do not exist in contemporary capitalism (and some either never existed or could not – logically – exist). The point of exploring these forms, especially in relation to education and training history, is that they can illuminate regarding why the social production of labour-

power is so fragmented (in general). They also inform regarding the particular form of fragmentation in the cases under examination.

As I have argued on many occasions (Rikowski, 1990, 1995, 1999, 2000a, 2002a), the best starting point for Marxist educational theory is labour-power and its social production. In *That Other Great Class of Commodities* (Rikowski, 2000c) I examined other possible starting points (e.g. education and the global market, the labour process and other springboards). But I concluded that the problems they raised, and, more importantly, the issues such starting points avoided (especially the question of what makes capitalist education and training specifically *capitalist* in nature) made labour-power and its social production by far the most promising first base for regenerating Marxist educational theory.

Before going on to outline some methods for exploring the social production of labour-power in capitalist society, the following sections provides some further definitions and concepts that are necessary to grasp what is being proposed.

6. Further Definitions

The previous section approached the issue of labour-power production from the vantage of *forms*. This section approaches the issue from the perspective of *content*.

A number of definitions are required before launching into an exploration of the forms of the social production of labour-power and methods of research that might be utilised. These definitions ideally require much deeper discussion than can be given here, and in unpublished work I have gone into much greater detail. Here, brief outlines must suffice. The relevant definitions/concepts are as follows.

General education

General education becomes a necessity. It is essential so that labourers can move about between jobs and labour processes, and thus aids the flow of labour-power around the national capital within the labour market. General education is basic numeracy and literacy first of all, moral education, scientific, arts and physical education – *divorced from the labour-power attributes required to work within individual capitals*.

General education is not biased towards the labour-power ‘needs’ of particular capitals, but is aimed at *capital-in-general*, the generalised ability to work in the capitalist labour processes. Thus, character and attitude development takes a *general form*; it nurtures those attitudes and personality traits pertinent to working in capitalist enterprises in general. Or, more

pertinently, this stance is taken as a having real substance, and as the basis for educating.

General education also becomes a necessity on the basis that constant re-training can occur (further phases in the development of labour-power) on the basis of an already partially produced labour-power with its general learned skills as attributes (especially numeracy and literacy, and increasingly computer literacy too). Furthermore, given international competition, representatives of capital in different nations attempt to raise the overall quality of labour-power through general education (Marx and Engels, 1848, p.117). This is one of the driving forces behind New Labour's obsession with raising standards and human capital development as expressed in its education reports since coming to power in 1997 (carrying on from the Conservative Party's identical obsession).

As the need for general education becomes a palpable social reality the split between it and *practical* education emerges. General education is the foundation of practical education and training. It is a 'base, in the form of the ability to read, write and calculate, for the acquisition of occupational skills' (Hussain, 1976, p.414). As Swift (1977) has noted:

General education is the principal preparation for employment, mainly through equipping individuals to absorb specific training (p.15).

Bullock and Yaffe (1979) have argued that in the post-war period the systematic development of the productivity of labour, the rapid development of the need for new skills and the extended use of new skills 'has meant that a minimum general education is now a necessity' (p.33). It facilitates occupational mobility and the flexibility of labour-power over the whole economy through aiding re-training and the ability of workers to change jobs. As Woolhouse and Haxby (1966) note in relation to running technician courses in engineering, such courses must be founded on a sound general education as the basis of future flexibility (p.36).

Practical Education

Practical education involves *specialisation* in relation to capital through emphasis on the knowledge, skills and other labour-power attributes required to work in the labour process within a particular fraction (e.g. manufacturing, service or agriculture) or sector of capital (a specific industry). Numeracy and literacy, general knowledge and personality traits and attitudes and outlooks are learnt and developed and tailored towards the requirements of working within a specific *set* of labour processes.

This proceeds on the basis of general education. It also involves the social production of work and social attitudes and personality traits and the development of general abilities and physical qualities pertinent to particular types of labour processes. Practical education is *applied general education*. It

may also take the form of concentrating on elements of general education that are pertinent to a particular sector or fraction of capital. Examples of it are the UK's General National Vocation Qualifications (GNVQ) and the old day release programmes for apprentices (where literacy and numeracy were biased towards particular trades).

As the potential labourer within practical education moves nearer in social distance towards the labour process, then the labour-power attributes can be enumerated with more precision and less generality. Employers also typically have more direct control regarding what goes into syllabuses and on matters touching on the ethos of the courses followed as compared with general education.

The distinction between practical and general education is not hard and fast. Indeed, the Hadow Report (1926) argued that a 'bias' could be given to general education in the proposed modern (eventually secondary modern, post-1944) schools. General education could proceed with the needs of either industry, commerce or agriculture (the three classical fractions of capital) in view (Hadow Report, 1926, p.121). Employers and their representatives, especially in UK Government reports on education and training, have continually debated the relation between general and practical education.

Training

Training is the process of bringing a person to a standard such that effective performance in a specific form of labour process is possible. The UK's National Vocational Qualifications (NVQs) with their foundation on work competencies are a prime example of the practical realisation of this 'worker effectiveness' in terms of labour performance and the transformation of labour-power into labour. Training, involving practice, observation and instruction is concerned with developing labour-power attributes for proficient utilisation in relation to a particular labour process, or set of labour processes. Furthermore, training is also concerned with raising the quality of labour-power, or specific labour-power attributes *above the social average* – thus yielding a competitive edge. Re-training is a further moment in the development of labour-power attributes, based necessarily on previous labour-power development.

The other feature of training is that the social distance between it and the actual labour process narrows further. Thus, in some forms of on-the-job training and work-based learning through real production or service exercises, the social distance can be relatively insignificant. As it narrows, the practical concerns of employers, line managers, production managers and so on come increasingly to the fore. The subsumption of learning under labour-power production becomes increasingly direct, obvious and socially defined as individuals move nearer the labour process.

7. Some Methods for Researching the Social Production of Labour-Power in Capitalism

The preceding sections were preparatory. They set the scene in terms of the form of Marxism being advanced in this paper, why I hold labour-power to be the most important commodity in the known human universe and what labour-power *is*, including a discussion on labour-power aspects and attributes. Finally, general and practical education and training were outlined briefly as preparation for what happens in this section. On this basis, some methods for exploring the social production of labour-power in capitalism are outlined below.

1. Researching forms of labour-power production

The social production of labour-power in contemporary capitalism is highly fragmented. The forms in which labour-power is socially produced in capitalism incorporates *institutional splits*. The process is fragmented into general education (schooling), on/off-the-job training, further and higher education, character and attitude training, the development of abilities in the labour process and a whole plethora of schemes for the unemployed, and this makes for great difficulties – theoretical and in terms of empirical work.

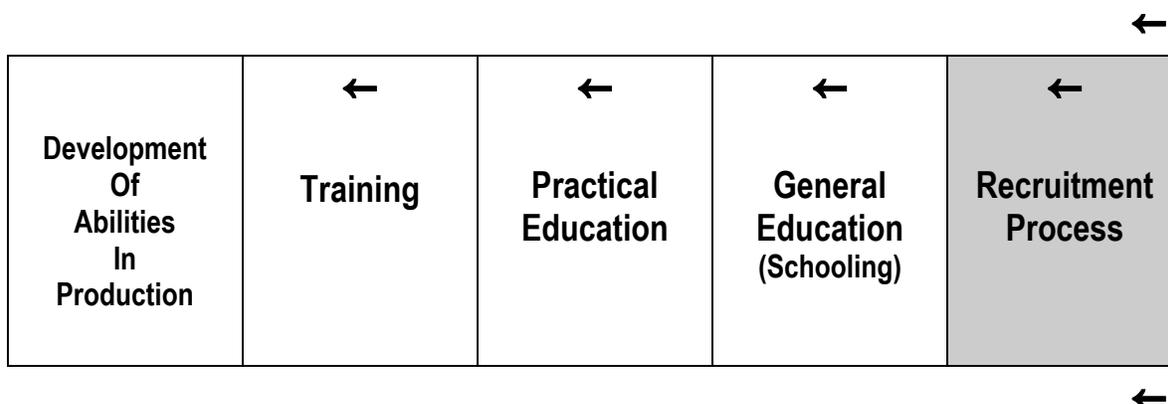
A number of points require elaboration here. For complex skilled labour-power, schooling may include elements of what is commonly referred to as further or higher education. This institutionally fragments the process of production of skilled and professional labour-power further still. The recruitment process is not part of the social production of labour-power, and may intervene between compulsory schooling and training and further development of labour-power. Furthermore, biographically, individuals' labour-power production is likely to be punctuated by a number of recruitment episodes as they change jobs. This fragments the process of labour-power production further. The recruitment process is a labour market institution. Training involves either/both off-the-job elements where trainees are formally instructed in the practical aspects of the work away from the labour process. This may be in training sections or schools centres and/or on-the-job elements where observation may be combined with instruction, simulations, doing practise jobs or real work under varying degrees of supervision within the labour process.

Hodgkinson (1991, pp.206-207) has written on the institutional fragmentation of the production of labour-power in capitalism. He argues that in order to grasp and understand it, it needs to be viewed as a 'separation-in-unity' (p.207). However, he fails to provide a *method* through which this separation can be re-united in thought. Without such a method, the phenomenal forms of labour-power production, the actual combinations of schooling, training and so on, in relation to *categories of capital* are taken for granted.⁷ One of the outcomes of this is that Hodgkinson argues that there is a

'contradiction between education and training' (p.217) on the basis that education assumes a non-commodity form whereas training does become a form of commodification. This conceals a multitude of confusions on the basis of the analysis developed here. Education is not a commodity in the main. However, private schooling increasingly augmented with the business takeover of state-financed schools brings education as a commodity to life. On the analysis here, education is involved in commodity production through socially producing labour-power. At the heart of Hodgkinson's analysis is the fact that the institutional separation of education and training has not been brought into question. Whilst Hodgkinson claims to have moved outside conventional sociology of education through Marxist form analysis he is still caught within the seductive web of viewing the social formation as a set of fragmented and 'contradictory' *institutions*. Furthermore, the *unity* of all the labour-power attributes developed and formed within all these fragmented elements is established as a *real phenomenon* in two senses. Firstly, in the labour process when labour-power attributes developed over the range of institutions involved in developing the individual labour-powers. Secondly, the unity is established in relation to the life-cycle of the labourer, but this can only be seen retrospectively as the *movement* of potential labour-powers towards particular labour processes is an effect of the 'free' labour-power market and the openness of career trajectories. This second point can only be seen through examining elementary and general social forms of the social production of labour-power. Re-constituting these forms constitutes part of the *method* of understanding the fragmentation of this process.

The method of re-uniting the fragmented elements of the social production of labour-power raises issues about its fragmentation at the phenomenal level in contemporary capitalism. The following two forms, presented as diagrams below, are 'logical', abstract (but nevertheless *real*) rather than concrete forms.

Figure 1 – The Social Production of Labour-Power: Elementary-Logical Form



In its first form (Figure 1), the whole of the social production of labour-power takes place *within* individual capitals. There is no need to share labour-power 'visions' with other capitals. The problem of intentionality – the process of producing labour-power to definite intentions, goals and objective – is reduced. This because those involved in socially producing labour-power are employed directly by the individual capital to ensure that that labour-power is educated, trained and developed in relation to the specific future roles(s) the workers will take on in the labour process. The form is a *logical* one as there is a movement in the process (and this movement takes place anyway, even within the highly complex social forms of labour-power production that exist in contemporary capitalism) towards the labour process. It starts with general education unrelated to any specific capitals, through to practical education (where there is a bias towards the specific capital) and then goes on to training that builds on the two prior forms of education, up to labouring in the labour process. The arrows indicate the direction and movement of the process.

In Figure 2, a more complex form is indicated as recruitment breaks up the process. General education has been split from the direct control of capital and is put under the aegis of the state. The difficulty arises in the search for explanation as to why, in fact, this does and has occurred. This is the basic fissure within the social production of labour-power. There are explanations regarding why this occurs in the literature, and these shall not be pursued here.⁸ For the moment, we can note the differences between general and practical education and the eventual necessity to explore why it is that the capitalist state takes over the former.

Figure 2 – The Social Production of Labour-Power: Complex Form

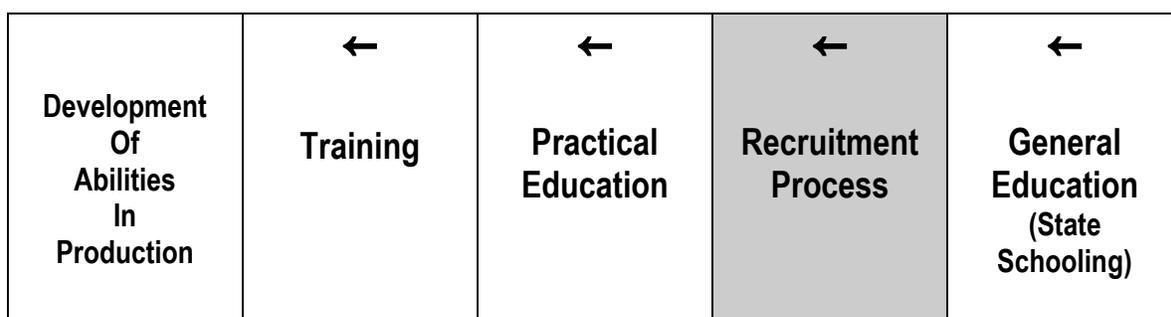
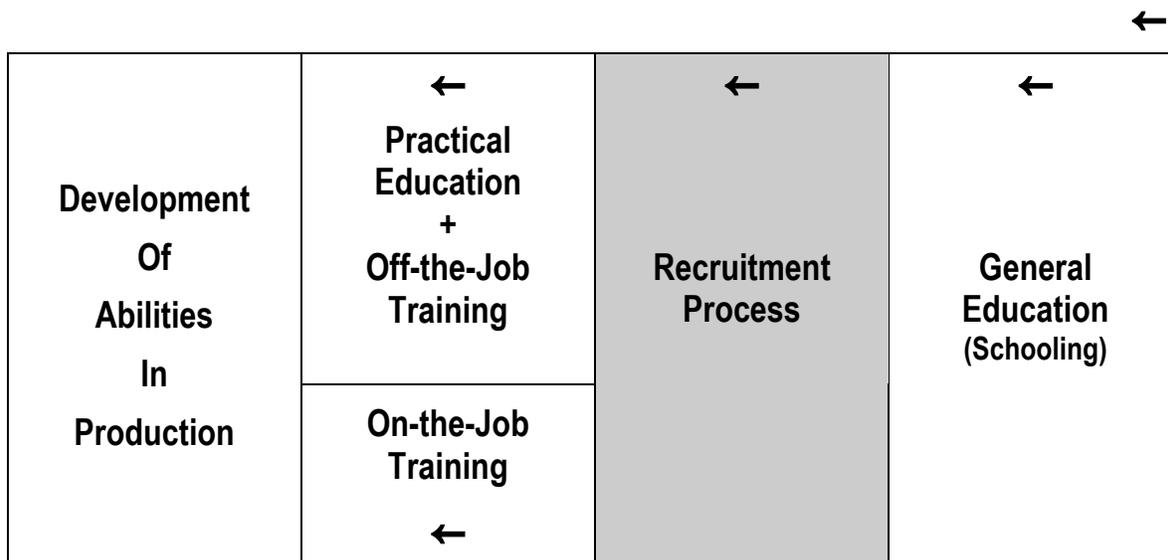


Figure 3 illustrates a real-life example of the social production of labour-power taken from research into the recruitment of engineering apprentices undertaken in the early 1980s. This research indicated a number of such concrete forms. We can now formulate some research proposals.

Figure 3 – The Social Production of Labour-Power: A Concrete Form



Research Proposals

On the basis of the analysis so far:

- The abstract and general forms of labour-power require analysis in order to explain the forces making for the institutional fragmentation of the social production of labour-power
- In order to grasp the forces at work, it is proposed that a range of historical and empirical studies be undertaken which examine changes in the *concrete forms* of labour-power production. It could be hypothesised that these studies would throw light on unsustainability of the abstract and general forms, whilst also indicating their *virtual existence and real effects*.
- The studies would cut across a range of different sectors of capital and explore a range of strata of labour-powers in terms of their complexity and development.

2. Researching individual labour-power development trajectories

As well as exploring the social forms that the social production of labour-power takes, other studies could examine individuals' social production trajectories through reconstructing the total productive processes they have experienced. Such studies could also examine how these individuals experienced and coped with the *contradictions* flowing from the labour-power aspects. Retrospective biographical interviewing would be the most appropriate method for reconstructing the total social production process and the individual's response to and interpretation of it.

3. *The contradictory experience of labour-power production*

There is a need for fieldwork studies that focus on the *contradictions* of “everyday” labour-power production. This could be done through in-depth school, college or training institutional studies.

4. *Resistance and incorporation*

Studies focusing on how, why and in what ways individuals *resist* process of self-reduction to labour-power (human capital). Such studies would be useful in terms of understanding how processes of the *capitalisation of the human can be resisted*, where opportunities for forging non-capitalist labour-power production might lay and also how people become orientated towards *incorporation* of themselves under labour-power (human capital).

Conclusion: The Methods Suppressed

The studies outlined above are only a small sample of what could be done on the basis of the ideas outlined in this paper. The research proposals are rough and minimal, and would be need to be worked up considerably to become useful.

However, the purpose of such studies should never be lost from view. Marxism is a theory *against society*, and the question of how such studies would help human liberation from the social domination of capital must always be to the fore – otherwise the project falls back into a purely academic Marxist mode of operation.

Another issue is whether research that is explicitly aimed to aid the process of breaking out of the straightjacket of capitalist society is ever likely to get serious research funding. I suspect not. The New Labour Government seems intent on controlling academic research ever more tightly, and concentrating research resources in the old universities. A cloak of research ‘standards’ (the Research Assessment Exercise) masks the process.

Perhaps such efforts as outlined above will be left to postgraduate research and unfunded efforts by Marxists within and beyond the academy. It can be surmised that the research outlines and ideas above will remain stillborn, suppressed and repressed as “anti-capitalist” research. To uncover the contradictions flowing through the social production of labour-power and through labour-power itself, as they are experienced in everyday life by individuals and organisations, would run absolutely counter to conventional education research, sociology of education and policy-oriented research. It seems too much like research that really does have value for a future *with* a future: socialism.

Notes

1. The notion of a 'universal' ontology of any kind is something I would argue against.
2. In existing capitalist society, social forms attain *altered states* in that they become incorporated within other social forms as *aspects* of those forms, whilst simultaneously incorporating those other social forms as aspects of themselves. Thus, education is a form of commodity production (of labour-power), but production (the labour process) is also a *form of education* (for the person as labour-power, for example, but also more widely). To date, the focus of my work has been largely on the former: education as production. This may have given the *impression* that I operate within a 'reductionist' position, perhaps engendered by the fact that my work has not yet been presented in any sustained way, as in a book. At present it exists as articles (some in e-journals), numerous conference papers and unpublished work.
3. My work would indeed be pretty hopeless if it did not allow for the *existence* of institutions such as schools, local education authorities (LEAs) and the rest. I do say, however, that the concepts of form, process, aspect, totality, contradiction, negation, relation and others replace the focus on institutions, but this does not deny the *existence* of institutions. That is Willmott's wishful thinking. It does, however, completely reconfigure the research effort. Thus, rather than focusing on educational institutions (as in conventional sociology of education and the much-hyped policy sociology of education), the focus turns towards particular social processes (for example, the social production of labour-power) or social forms (e.g. human capital as the social form assumed by labour-power in capitalist society). The key point for institutions is how they are implicated in these processes and forms.
4. I shall not define what orthodox Marxism is here, only insofar as to say that one of the key components is its reliance on the base/superstructure model of capitalist development. Education is typically part of the 'superstructure' that is determined or conditioned by the economic base, resulting in a crude reductionism and a tightly closed form of Marxism. I have critiqued this form of Marxism in relation to Marxist educational theory in Rikowski (1996a, pp.553-561). For a devastating and sustained critique of orthodox or traditional Marxism, see Moishe Postone's *Time, Labor, and Social Domination* (1996, especially chapter 1).
5. In such works as Dinerstein 1997, 2002; Dinerstein and Neary 2002a-b; Neary, 1997, 1999, 2002a-b; Neary and Rikowski, 2000, 2002; Neary and Taylor, 1998; Taylor, 2002; and Rikowski, 1999a, 2000d, 2000e, 2001c and 2002a.
6. This section is drawn from a sub-section of *The Importance of Being a Radical Educator in Capitalism Today* (Rikowski, 2001c).

7. For discussion on the notion of 'categories of capital' in relation to labour-power production see Rikowski (2001a).
8. In unpublished work I have argued that this fissure can be explained as a moment within capital in general, though the history behind the split is specific to each national capital.

References

- Ainley, P. (1994) *Degrees of Difference: higher education in the 1990s* (London: Lawrence & Wishart).
- Arthur, C. (1980) Personality and the Dialectic of Labour – Locke, Hegel and Marx, *Radical Philosophy*, autumn, No.26, pp.11-19.
- Atkinson, E. (2002) The Responsible Anarchist: postmodernism and social change, *British Journal of Sociology of Education*, Vol.23 No.1, pp.73-87.
- Bailey, L. (1995) The Correspondence Principle and the 1988 Education Reform Act, *British Journal of Sociology of Education*, December, Vol.16 No.4, pp.479-494.
- Bates, I. & Riseborough, G. (1993) *Youth and Inequality* (Milton Keynes: Open University Press).
- Blackman, S. (1995) *Youth: positions and oppositions – style, sexuality and schooling* (Aldershot: Avebury).
- Bonefeld, W. (1992) Social Constitution and the Form of the Capitalist State, in: *Open Marxism: Volume I – Dialectics and History* (London: Pluto).
- Bonefeld, W. (1994) Human Practice and Perversion: Between Autonomy and Structure, *Common Sense*, June, number 15, pp.43-52.
- Bonefeld, W. (1995) Money, Equality and Exploitation: An Interpretation of Marx's Treatment of Money, in: W. Bonefeld & J. Holloway (Eds.) *Global Capital, National State and the Politics of Money* (Basingstoke: Macmillan).
- Bowles, S. & Gintis, H. (1976) *Schooling in Capitalist America: educational reform and the contradictions of economic life* (London: Routledge & Kegan Paul).
- Brown, P. (1987) *Schooling for Ordinary Kids: Inequality, Unemployment and the New Vocationalism* (London: Tavistock).
- Bullock, P. & Yaffe, D. (1979) Inflation, the Crisis and the Post-War Boom, *Revolutionary Communist*, Theoretical Journal of the Revolutionary Communist Group, Reprint Number 3-4, September.
- Cole, M., Hill, D., Rikowski, G. & McLaren, P. (2001a) *Red Chalk: On Schooling, Capitalism and Politics* (Brighton: Institute for Education Policy Studies).
- Cole, M., Hill, D., Rikowski, G. & McLaren, P. (2001b) Education, Struggle and the Left Today – Interview of Mike Cole, Dave Hill, and Glenn Rikowski by Peter McLaren, *International Journal of Educational Reform*, Vol.10 No.2, pp.145-162.
- Cressey, P. & MacInnes, J. (1980) Voting for Ford: Industrial Democracy and the Control of Labour, *Capital & Class*, No.11, pp.5-53.

- Dinerstein, A. (1997) Marxism and Subjectivity: searching for the marvellous (Prelude to a Marxist notion of action), *Common Sense*, December, number 22, pp.83-96.
- Dinerstein, A. (2002) Regaining Materiality: Unemployment and the *Invisible Subjectivity of Labour*, in: A. Dinerstein & M. Neary (Eds.) *The Labour Debate: An Investigation into the Theory and Reality of Capitalist Work* (Aldershot: Ashgate).
- Dinerstein, A. & Neary, M. (2002a) From Here to Utopia: Finding Inspiration for the Labour Debate, in: A. Dinerstein & M. Neary (Eds.) *The Labour Debate: An Investigation into the Theory and Reality of Capitalist Work* (Aldershot: Ashgate).
- Dinerstein, A. & Neary, M. (2002b) Anti-Value-in-Motion: Labour, Real Subsumption and the Struggles against Capitalism, in: A. Dinerstein & M. Neary (Eds.) *The Labour Debate: An Investigation into the Theory and Reality of Capitalist Work* (Aldershot: Ashgate).
- Hadow Report (1926) *Education of the Adolescent* (London: HMSO).
- Hodgkinson, P. (1991) Educational Change: A Model for its Analysis, *British Journal of Sociology of Education*, Vol.12 No.2, pp.203-222.
- Hohn, H. (1988) What is Qualification? Lifestyle and Personality as Selection Criteria, in: H. Hohn & S. Wood (Eds.) *Recruitment and Selection in the Labour Market: A Comparative Study of Britain and West Germany* (Aldershot: Gower).
- Hollands, R. (1990) *The Long Transition: Class, Culture and Youth Training* (Basingstoke: Macmillan).
- Holloway, J. (1991) The State and Everyday Struggle, in: S. Clarke (ed.) *The State Debate* (Basingstoke: Macmillan).
- Holloway, J. (1992) Crisis, Fetishism, Class Composition, in: W. Bonefeld, R. Gunn & K. Psychopedis (Eds.) *Open Marxism: Volume II – Theory and Practice* (London: Pluto Press).
- Holloway, J. (1993) The Freeing of Marx, *Common Sense*, October, number 14, pp.17-21.
- Holloway, J. (1994) The Relevance of Marxism Today, *Common Sense*, June, number 15, pp.38-42.
- Holloway, J. (1995) From Scream of Refusal to Scream of Power: The Centrality of Work, in: W. Bonefeld, R. Gunn, J. Holloway & K. Psychopedis (Eds.) *Open Marxism: Volume III – Emancipating Marx* (London: Pluto Press).
- Holloway, J. (1996) The Concept of Power and the Zapatistas, *Common Sense*, June, number 19, pp.20-27.
- Hussain, A. (1976) The Economy and the Educational System in Capitalistic Societies, *Economy and Society*, Vol.5, pp.413-435.
- Marx, K. (1844) [1977] *Economic and Philosophical Manuscripts of 1844* (Moscow: Progress Publishers).
- Marx, K. (1858) [1973] *Grundrisse: Foundations of the Critique of Political Economy (Rough Draft)* (Harmondsworth: Penguin).

- Marx, K. (1863) [1969] *Theories of Surplus Value – Part One* (London: Lawrence & Wishart).
- Marx, K. (1866) [1976] *Results of the Immediate Process of Production*, Addendum to 'Capital', volume 1 (Harmondsworth: Penguin).
- Marx, K. (1867a) [1977] *Capital: a critique of political economy – Volume 1* (London: Lawrence & Wishart).
- Marx, K. (1867b) [1977] Preface to the First German Edition of *Capital – Volume 1* (London: Lawrence & Wishart).
- Marx, K. & Engels, F. (1848) [1977] *Manifesto of the Communist Party*, Selected Works, Volume One (Moscow: Progress Publishers).
- McLaren, P. & Rikowski, G. (2001) Pedagogy for Revolution against Education for Capital, *Cultural Logic: An Electronic Journal of Marxist Theory & Practice*, Special Issue on Marxism and Education, edited by Rich Gibson and E. Wayne Ross, October, Vo.4 No.1, 44 pages at: <http://eserver.org/clogic/>
- McNally, D (1993) *Against the Market: Political Economy, Market Socialism and the Marxist Critique* London: Verso).
- Mizen, P. (1995) *The State, Young People and Youth Training: In and Against the Training State* (London: Mansell).
- Neary, M. (1997) *Youth, Training and the Training State: The Real History of Youth Training in the Twentieth Century* (London: Macmillan).
- Neary, M. (1999) Youth, Training and the Politics of 'Cool', in: D. Hill, P. McLaren, M. Cole & G. Rikowski (Eds.) *Postmodernism in Educational Theory: Education and the Politics of Human Resistance* (London: Tufnell Press).
- Neary, M. (2002a) Labour Moves: A Critique of the Concept of Social Movement Unionism, in: A. Dinerstein & M. Neary (Eds.) *The Labour Debate: An Investigation into the Theory and Reality of Capitalist Work* (Aldershot: Ashgate).
- Neary, M. (2002b) *Faith in the Coalfields: Community Regeneration or Managing Decline?* (London: The Church Urban Fund).
- Neary, M. & Rikowski, G. (2000) *The Speed of Life: the significance of Karl Marx's concept of socially necessary labour-time*, a paper presented at the British Sociological Association Conference 2000, 'Making Time – Marking Time', University of York, 17-20 April.
- Neary, M. & Rikowski, G. (2002) Time and Speed in the Social Universe of Capital, in: G. Crow & S. Heath (Eds.) *Times in the Making: Structure and Process in Work and in Everyday Life* (London: Palgrave) (forthcoming).
- Neary, M. & Taylor, G. (1998) *Money and the Human Condition* (London: Macmillan).
- Nunn, A. (2002a) Interpreting the 'Knowledge Economy' Cacophony: The extension of commodification to information production, dissemination and storage, *Information for Social Change*, winter 2001/2002, number 14, pp.69-74, available from <http://libr.org/ISC>
- Nunn, A. (2002b) GATS, Higher Education and 'Knowledge Based Restructuring' in the UK, *Education and Social Justice*, Vol.4 No.1, pp.32-43.

- Postone, M. (1996) *Time, Labor, and Social Domination: A reinterpretation of Marx's critical theory* (Cambridge: Cambridge University Press).
- Richards, F. (1986) Marxism in Our Time, *Confrontation*, number 1, pp.4-31.
- Rikowski, G. (1990) *The Recruitment Process and Labour Power*, unpublished paper, Division of Humanities & Modern Languages, Epping Forest College, Loughton, Essex.
- Rikowski, G. (1992) Work Experience Schemes and Part-time Jobs in a Recruitment Context, *British Journal of Education and Work*, Vol.5 No.1, pp.19-46.
- Rikowski, G. (1995) *Education Markets and Missing Products*, a paper presented at the Conference of Socialist Economists, University of Northumbria, Newcastle, 7-9 July.
- Rikowski, G. (1996a) Left Alone: end time for Marxist educational theory? *British Journal of Sociology of Education*, Vol.17 No.4, pp.415-451.
- Rikowski, G. (1996b) *Apprenticeship and the Use-value Aspect of Labour-Power*, first paper prepared for the ESRC Seminar Series on Apprenticeship, Nene College, Northampton, 31st May.
- Rikowski, G. (1996c) *Revealed Recruitment Criteria through the Use-value Aspect of Labour-Power*, second paper prepared for the ESRC Seminar Series on Apprenticeship, Nene College, Northampton, 31st May.
- Rikowski, G. (1996d) *ESRC Forum: Visit of Professor Ron Amman, Chief Executive, ESRC, to the University of Birmingham, Senate Room, 22nd May – a report from Glenn Rikowski to the CRS Group*, 18th June.
- Rikowski, G. (1997) Scorched Earth: prelude to rebuilding Marxist educational theory, *British Journal of Sociology of Education*, Vol.18 No.4, pp.551-574.
- Rikowski, G. (1999a) Education, Capital and the Transhuman, in: D. Hill, P. McLaren, M. Cole & G. Rikowski (Eds.) *Postmodernism in Educational Theory: Education and the Politics of Human Resistance* (London: Tufnell Press).
- Rikowski, G. (1999b) Nietzsche, Marx and Mastery: the Leaning Unto Death, in: P. Ainley & H. Rainbird (Eds.) *Apprenticeship: Towards a New Paradigm of Learning* (London: Kogan Page).
- Rikowski, G. (2000a) *Education and Social Justice within the Social Universe of Capital*, a paper prepared for the British Educational Research Association Day Seminar on 'Approaching Social Justice in Education: Theoretical Frameworks for Practical Purposes', Clifton Hall, Nottingham Trent University, February.
- Rikowski, G. (2000b) *Why Employers Can't Ever Get What They Want. In fact, they can't even get what they need*, a paper presented to the School of PCET Staff/Student Seminar, University of Greenwich, Queen Anne's Palace, 27th March.
- Rikowski, G. (2000c) *That Other Great Class of Commodities: Repositioning Marxist Educational Theory*, a paper presented at the British Educational Research Association Annual Conference, Cardiff University, 7-9 September.
- Rikowski, G. (2000d) *Messing with the Explosive Commodity: School Improvement, Educational Research and Labour-Power in the Era of Global Capitalism*, a paper

- presented at the British Educational Research Association Conference 2000, Cardiff University, 7-9 September.
- Rikowski, G. (2000e) *Marx and the Future of the Human*, a paper presented at the Birkbeck College Seminar on 'Marx, Individuals & Society', University of London, 26th October.
- Rikowski, G. (2001a) Education for Industry: A Complex Technicism, *Journal of Education and Work*, Vol.13 No.1, pp.29-49.
- Rikowski, G. (2001b) *The Battle in Seattle: Its significance for education* (London: Tufnell Press).
- Rikowski, G. (2001c) *The Importance of Being a Radical Educator in Capitalism Today*, Guest lecture in Sociology of Education, The Gillian Rose Room, Department of Sociology, University of Warwick, Coventry, 24th May (Revised and extended, 30th May 2001).
- Rikowski, G. (2001d) *After the Manuscript Broke Off: Thoughts on Marx, Social Class and Education*, a paper presented at the British Sociological Association Education Study Group Meeting, Kings College London, 23rd June.
- Rikowski, G. (2001e) *Marx, Universal Individuals and Lifelong Learning for Social Transformation*, a paper presented at the Contemporary Social Movements & Social Change: Dialogues between Research and Practice in Lifelong Learning Seminar. Session on 'Radicalising Lifelong Learning', Lifelong Learning Institute, University of Leeds, 6th December.
- Rikowski, G. (2002a) Fuel for the Living Fire: Labour-Power! in: A. Dinerstein & M. Neary (Eds.) *The Labour Debate: An investigation into the theory and reality of capitalist work* (Aldershot: Ashgate).
- Rikowski, G. (2002b) Transfiguration: Globalisation, the World Trade Organisation and the National Faces of the GATS, *Information for Social Change*, number 14, winter 2001/2002, pp.8-17 (Available from <http://libr.org/ISC/TOC.html>).
- Rikowski, G. (2002c) *Globalisation and Education*, a paper prepared for the House of Lords Select Committee on Economic Affairs Inquiry into the Global Economy, available from Education-line, at <http://www.leeds.ac.uk/educol>
- Shaw, M. (1975) *Marxism and Social Science: The Roots of Social Knowledge* (London: Pluto Press).
- Stafford, A. (1981) Learning Not to Labour, *Capital & Class*, autumn, No.81, pp.55-77.
- Swift, D. (1977) *Schooling and Society*, Open University, E202 Schooling and Society, Unit 1 (Milton Keynes: Open University Press).
- Taylor, G. (2002) Labour and Subjectivity: Rethinking the Limits of Working Class Consciousness, in: A. Dinerstein & M. Neary (Eds.) *The Labour Debate: An Investigation into the Theory and Reality of Capitalist Work* (Aldershot: Ashgate).
- Willis, P. (1977) *Learning to Labour: how working class kids get working class jobs* (Farnborough: Saxon House).
- Willmott, R. (2001) The 'Mini-Renaissance' in Marxist Educational Sociology: a critique, *British Journal of Sociology of Education*, Vol.22 No.2, pp.203-215.

Woolhouse, J. & Haxby, P. (1966) The Training of Technicians, in: Sir R. Nesbitt-Hawes (ed.) *The Training of Youth in Industry: Volume 1 – Engineering* (Oxford: Pergamon Press).

Wood, S. (1986) Recruitment Strategies and the Recession, *British Journal of Industrial Relations*, March, Vol.XXIV No.1.

Wood, S. (1988) Personnel Management and Recruitment, in: P. Windolf & S. Wood (Eds.) *Recruitment and Selection in the Labour Market: A Comparative Study of Britain and West Germany* (Aldershot: Avebury, Gower Publications).

Glenn Rikowski

London, 6th March 2002