Abstract. This article assesses the ability of labour process theory (LPT) to account for the persistence of managerial control under the apparent conditions of greater autonomy and discretion we have come to associate with ‘knowledge Work’. LPT has traditionally problematized control around the need to resolve ‘the indeterminacy of labour’—that is, how do managers ensure that workers’ actual labouring efforts approach their potential labour power? In contrast, I propose that it is more useful to problematize control around the ‘indeterminacy of knowledge’—that is, how do managers ensure that workers’ cognitive efforts approach their full cognitive potential? A common response to the problem of the indeterminacy of knowledge has been to cede discretion to workers so that they can exercise their mental capabilities in order to provide their organizations with solutions to workplace problems. I will show, however, that this still requires the operation of disciplinary mechanisms that perpetuate managerial control under conditions that ostensibly reverse the separation of the conception and the execution of work tasks inherent in the logic of Taylorism. Key words. Foucault; knowledge work; labour process theory; management control; Marx; Taylorism

Marxist Labour Process Theory and the Problem of the Indeterminacy of Labour

How can we account for the persistence of managerial control under circumstances where, arguably, the physical toil of manufacturing is being replaced by a world where we work more with our heads than our
hands? Is control still a meaningful concept now that the traditional fault line between managers (who traditionally conceived work in minute detail) and workers (who simply carried out the tasks set by their superiors) appears to have been bridged? My response to these sorts of questions may seem quaintly old-fashioned. It is that, when it comes to a reconsideration of workplace control, Marxist critiques—in particular, Labour Process Theory (LPT)—are not completely exhausted as a source of intellectual inspiration. I would temper this remark by saying that we have to be wary of the tendentious and degraded character of what Foucault (1991) called ‘Marxism after Marx’. This involves obsessive and abstract theoretical system building, undertaken at the expense of thinking about how individuals might effectively resist the power effects they encounter every day of their lives (see also Gouldner, 1980). Bearing in mind this caveat, I will show that the central problem of LPT—the indeterminacy of labour—still has some relevance for discussions of control, even when it is knowledge work that is under consideration. The indeterminacy of labour can best be thought of as the gap between an employee’s notional capacity to labour (i.e. their ‘labour power’) and what the employee actually ends up doing. Under LPT, the purpose of management control is to reduce this gap. Of course, there is a good deal of debate as to whether knowledge work—usually taken to be the manipulation of symbols rather than things, concepts rather than materials—is a distraction from more pressing social, economic, and political matters (Fleming et al., 2004). Leaving aside these concerns for the time being, for me, the burning issue is whether we take the indeterminacy of labour as a literal statement of the immutable laws of capitalist exploitation or as a normative representation of rational and moral conduct associated with the rationalizing forces of Modernity (Gerth and Mills, 1942; Carver, 1998). This article subscribes to the latter view and, along these lines, I will argue that the indeterminacy of labour should be seen as a parsimonious expression of a belief system that, in Blau’s (1961) terms, ‘socially legitimates’ the need for and exercise of control (and, to some extent, the legitimacy of resistance to that control). The equivocal nature of this last parenthetic comment is particularly important. This is because, under the rubric of classical Marxist LPT, control (and practices that aim to resist it) are premised on the attribution of rational and strategic intent on both sides of the equation: managers want workers to work as hard as they can in order to maximize surplus value while workers want to minimize this exploitation and keep the fruits of their discretionary effort to themselves. This knowing participation in the effort bargain is, of course, at odds with much of the recent popular rhetoric of ‘empowerment’ and ‘commitment’. Here, the problem of control is more likely to be articulated in terms of the ostensibly neutral ‘free-rider’ problem of neo-liberal economic theory. In other words, control protects the majority in an organization from a minority who indulge in opportunistic self-interested behaviour (Sewell and
Barker, 2005). Under this particular representation of rational and moral conduct, any objections to effective control are deemed to be irrational; a self-defeating exercise revealing the futility of arguing against a system aimed at preventing free-riding (even if, in the restricted language of economics, those free-riders are still behaving ‘rationally’ in the pursuit of personal utility). In contrast, I contend that we can still consider the labour process to be a struggle over the indeterminacy, not of labour, but of knowledge. Thus, rather than being a direct contest of wills with a zero-sum outcome (i.e. less effort expended towards the creation of surplus value is a victory for ‘Labour’ at the expense of ‘Capital’), indeterminacy should be considered as a contest over what comes to be seen as the appropriate rational and moral conduct in the quest for organizational knowledge. I will characterize this quest as the ‘elicitation’ and ‘representation’ of ‘legitimate’ knowledge (by definition a process that also excludes or marginalizes what is considered to be ‘illegitimate’ knowledge). In this sense, this article is an appeal for a consideration of what Carver (1998) calls the ‘Postmodern’ Marx where our main focus is on the discourse of commodities, value and money—that is, how we come to define the value of resources that there are, or might be, in the world.

Rethinking the Problem of Indeterminacy in Knowledge Work

In order to make the implications of this proposition clearer, I need to begin by clarifying some of the matters set out above. Under the rubric of classical LPT, the separation of conception and execution is premised on the belief that managers seek to exercise a monopoly over all the mental or cognitive aspects of work (Braverman, 1974). By driving out any discretion in this way, it reduces the non-managerial employee to a status tantamount to that of an automaton. For Braverman, enforcing this separation was the source of the ‘real’ subordination of labour; before managers were able to exercise this degree of control labour was only ‘formally’ subordinated to the interests of capital. Neo-liberal economic theory tells us, however, that all contracts are necessarily incomplete to some extent and that some cognitive discretion is inevitably ceded to the ‘agent’ (i.e. the employee) by a ‘principal’ (i.e. the manager) in the execution of a contracted task. This constant presence of discretion, even under the most tightly regulated contractual arrangements, has been seized upon by many advocates of teamwork and empowerment to justify the following logic. Instead of expending effort and resources to ensure that contracts are fulfilled to the letter (thereby incurring significant transaction costs), why not invert the problem completely and allow employees to use their inevitable discretion to the benefit of the corporation? Not only does this potentially reduce the transaction costs of monitoring compliance but it also acknowledges that managers may not have a monopoly on knowledge when it comes to the conception of effective work solutions. In this way, the problem of the labour process
moves from ‘How do we ensure that employees do as managers say?’ to ‘How do we ensure that employees realize the full fruits of their own expertise and ingenuity for the purposes of the organization?’ This view is consonant with approaches that see the essence of good knowledge management practice as the creation of the right conditions under which an organization can exploit the full extent of its employees’ cognitive abilities (e.g. Nonaka, 1991, 1994; Winter, 1994). Thus, organizational knowledge is seen as a firm-specific resource that is the aggregate of the individual cognitive capabilities of employees. Characteristically, understanding the uneven distribution of these capabilities and how they can be converted into a resource has theoretically and practically focused on resolving the split between ‘tacit’ and ‘explicit’ knowledge. For example, expanding on Polanyi’s (1967) definition, Cook and Seely Brown (1999) argue that it is best to think of tacit knowledge in terms of how we learn to ride a bicycle. Clearly, you must be able to remain upright but if you ask someone what they actually do to avoid falling over then it is highly unlikely that they can easily put it into words. Here, tacit knowledge is a necessary precondition for executing a specific task—in this case riding a bicycle—that no amount of explicit instruction (e.g. telling the rider to first turn the handlebars this way or that) can replace. Thus, in order to acquire the necessary tacit knowledge to undertake a task, it requires a certain degree of practice. Nevertheless, it is still considered that good explicit instruction is likely to shorten the learning process, regardless of the learner’s innate abilities.

This brief discussion of tacit knowledge neatly captures the problem of knowledge management: what is it about those who learn to master a task quickly that distinguishes them from slower learners? If the way in which these individuals have acquired the necessary tacit knowledge can somehow be identified then at least some aspects of this process can be formalized and turned into better explicit instruction for those slower learners. For Cook and Seely Brown (1999), this is a key aspect of the relationship between organizational knowledge as a potential resource and its realization through the effective execution of work tasks—‘organizational knowing’, as they put it—undertaken by individuals and groups. This argument has much in common with Thompson et al.’s (2001) discussion of knowledge work (which is usually claimed by managers as their exclusive domain) and ‘knowledgeability in work’ (a term which conveys the full range of skill, ingenuity, and resourcefulness exercised by the wider workforce). It is this distinction that provides the basic rationale for managers to intervene in this process because they see themselves as providing the crucial link between abstract organizational knowledge and practical organizational knowing. Indeed, much of the thinking about how we ‘do’ knowledge management focuses on how managers go about identifying the specialist skills of their best employees that can then be shared with others so that the organization can utilize its latent knowledge base (Tsoukas and Vladimirou, 2001). Attempting to
objectify or ‘codify’ organizational knowledge in this way—akin to mobilizing what Heidegger (1977) called a ‘standing reserve’ in the service of the corporation—is also a common theme in organizational economics (e.g. Steinmeuller, 2000). This plays well to an audience of managers who are anxious to demonstrate that they alone possess the necessary skills (that is, the knowledge management skills) that give the organization a competitive edge (Alvesson and Kärreman, 2001). In other words, although today’s ‘empowerment’ literature recognizes that employees are a ‘storehouse’ of organizational knowledge, only managers can effectively get at it. Moreover, it also justifies the creation of complex information systems purporting to act as repositories for organizational knowledge that can eventually make it available to everyone (Alvesson and Kärreman, 2001; Thompson and Walsham, 2004).

Despite being founded on the questionable assumption that tacit knowledge (or, at least, the means of acquiring tacit knowledge) can ever be made explicit, seeking ways of objectifying organizational knowledge is still hugely influential in theoretical and practical terms (Thompson and Walsham, 2004). As a result, developing an appreciation of the wider impact of this particular representation of the problem of knowledge management is, according to Alvesson and Kärreman (2001), at least as important as seeking the ‘true’ essence of organizational knowledge itself. Indeed, they suggest that approaches such as Nonaka’s have such strong rhetorical appeal exactly because they appear to make the impossible possible. In other words, by suggesting that tacit knowledge can be made explicit, managers come to believe that they can exercise control over what were previously considered to be matters of subjective personal experience. This observation resonates with McKinlay’s (2000) discussion of how Pharma—a multinational pharmaceutical company—attempted to develop a way of converting its ‘tacit’ knowledge into ‘explicit’ knowledge. However, this knowledge was already far from tacit (at least in Polanyi’s or Cook and Seely Brown’s terms). Indeed, the very fact that Pharma’s employees were able to use this so-called tacit knowledge to their own ‘advantage’ through acts of resistance (McKinlay, 2000) suggests that they were all too aware of their own capabilities and what they were worth to the corporation. This leads McKinlay to argue that the specific capabilities that were yet to come to the attention of managers were honed in what he describes as ‘unregulated social spaces’ (e.g. brainstorming sessions). Any attempt at regulating these social spaces would completely defeat their purpose for it is exactly the lack of a managerially imposed structure that made such sessions fruitful in the first place. This places managers in a bind, caught between the desire to assert control and the need to leave employees to their own devices. Thus, in reintegrating conception and execution (at least to a limited extent), then the problem of indeterminacy shifts from ‘did X actually perform their allotted task to the best of their physical abilities?’ (i.e. ‘did their expended physical labour approach their full potential labour
power?) to ‘under circumstances of limited discretion, did X actually perform their allotted task to the best of their cognitive abilities?’ (i.e. ‘did their cognitive efforts approach their full cognitive potential?’). Even though today’s managers may not be schooled in Marxian political economy, they can certainly understand the justification of control as shifting from solving the problem of free-riding or of ‘not pulling one’s weight’ in a physical sense to one where it is matter of not giving over one’s mind fully to the organization. 2 Reflecting this shift, for control to be effective in going some way toward resolving the indeterminacy of knowledge, two related functions must be performed. First, control is implicated in the identification of useful knowledge, a process known in the language of artificial intelligence as ‘elicitation’. In crude terms, this can be thought of as seeking out what exists inside the head of the person considered to be the most cognitively able employee. From this position, it is a logical move to the process of ‘representation’—that is, taking that knowledge and translating it into a form that can be apprehended by others in the organization. This effectively makes an individual’s personal knowledge available to the entire organization (and, in the absence of intellectual property restrictions, beyond the organization too) by it being inscribed in things like manuals and databases (McKinlay, 2000; Alvesson and Kärreman, 2001).

A good illustration of the relationship between elicitation and representation again comes from the field of artificial intelligence, especially activities that centre on the development of expert systems. Here a ‘knowledge engineer’ conducts a ‘data mining’ session, interrogating an expert—say a physician—in order to elicit the personal cognitive process that they go through when a patient presents with a complaint. This will commonly involve tried and tested diagnostic ‘algorithms’ such as previously institutionalized decision-making techniques and practices that they have learnt in medical school. However, it may also involve personal ‘heuristics’ developed through their interactions with patients or their exercise of judgement ‘in the field’ (Tsoukas and Vladimirou, 2001). If this personal approach is deemed to be useful to others then it is the job of the knowledge engineer to formalize these heuristics into an algorithm. This can then be represented in a way that is compatible with and additional to existing diagnostic decision-making rules. In this way, knowledge that was formerly considered to be ‘in the head’ of the expert becomes a publicly available resource (incidentally, an argument that has commonly been advanced to explain the effective deskilling of some professions; see Johnson, 1972). The key difference, however, between this conception of the elicitation and representation of knowledge and the one that I am proposing we consider in relation to workplace control centres on the latter’s dynamic nature. Thus, whilst an expert data mining session is usually a ‘one-off’ event, the logic of continuous improvement and the search for ‘competitive advantage’ demands that new knowledge is always being generated. In response to this particular
demand, the elicitation and representation of knowledge must (by definition) be continuous and, preferably, occur in ‘real time’. It is not sufficient for employees to exercise their cognitive abilities in an ad hoc or episodic manner; once the mentally agile have solved one problem, they must immediately move on to turn their cognitive abilities to the next pressing matter. Not, however, before they have passed on those solutions to their less able colleagues. Thus, it is this process of identifying and sharing knowledge that links knowledge management with the logic of continuous improvement and employee problem solving we associate with managerial movements such as total quality management and teamwork (Winter, 1994; Sewell, 1998).

The vision of workers being trusted to devise their own work tasks is, as we saw earlier, at odds with the traditional conception of the dynamics of control. For example, when it came to the detailed execution of work, Taylor (1912) certainly recognized that workers possessed know-how which managers did not have. Taylor’s objection to employee discretion, however, was that he simply did not trust workers to use this know-how for the good of the organization. Thus, the fear of shirking, free-riding or ‘soldiering’ won out over the potential productivity benefits of allowing any employee discretion. Thus, it became the manager’s ‘duty’ to first set and then rigorously enforce work rules. In this way, managerially defined productivity norms not only represented the acceptable minimum; they became the maximum too. Why bother striving to exceed performance targets when, paradoxically, working ‘too hard’ could just as easily be construed as a form of disobedience as ‘not working hard enough’?3 This brings me to a crucial point. With its concentration on the indeterminacy of physical labour and its belief that real subordination should be resisted by refusing to yield to the demands of managers (i.e. by exercising autonomy), Marxist LPT represents the obverse of a liberal view of workplace control premised on mutual protection against free-riding. Thus, whether it is seen as a form of legitimate resistance (let us call this the Radical perspective) or as a form of opportunistic self-interested behaviour (let us call this the Liberal perspective), not working as hard as one could implies a degree of rational and calculative intent on the part of the employee (Sewell and Barker, 2005). Similarly, the exercise of control by managers is also seen as a rational response to these forms of behaviour, either to ensure that executed labour approximates to labour power or to protect all members of the organization from being exploited by the selfish actions of a minority (Sewell and Barker, 2005).

These Radical and Liberal conceptions of the general purpose of control can each be used to justify common managerial practices such as performance monitoring, workplace surveillance, reward, punishment and retraining (cf. Gouldner, 1955). An important point to note here, however, is that regardless of which conception is preferred they are both, in Burke’s (1969) term, somehow ‘indebted’ to each other. In this case, the indebtedness stems from them both being particular expressions
of a Nietzschian will-to-power. Taking my cue from Weber’s insight (courtesy of Nietzsche; see Turner, 1991) that all human relations must ultimately be seen as relations of power, I take the will-to-power to mean our ceaseless attempts to reorganize the world in pursuit of our desire to subsume all aspects of human life under a totalizing rationalism. This gives rise to characteristic arrays of power relationships (Schacht, 1995) and, in an organization, these involve the specific disciplinary mechanisms that seek to ensure a particular form of conduct that is congruent with certain preferred systems of rationality and morality (Foucault, 2000).

Taking practices of control as an expression of a will-to-power is helpful because it demonstrates a perhaps unexpected degree of continuity between classical LPT literature and more recent thinking about the control of knowledge work. Specifically, the problematization of control around the indeterminacy of knowledge, with its subsequent solutions founded on the need to elicit and represent the acquired know-how of employees, is an expression of a system of rationality and morality that still requires us to give ourselves over completely to the organization. This time, however, it is not just in terms of our physical capabilities (the moral basis for the specific disciplinary mechanisms of Taylorism) but also in terms of our cognitive abilities (the moral basis for the specific disciplinary mechanisms of knowledge management). Moreover, this conceptualization of knowledge work and control reflects similar Radical and Liberal preoccupations in that the appearance of ‘hoarding’ knowledge or in some way keeping it to oneself can be seen as either a rational form of resistance to subordination or as utility maximizing self-interested opportunistic behaviour (e.g. ‘why give up something that confers upon me an advantage in doing my job if it means that I will lose the potential to earn more than my colleagues?’). This is not to say, however, that the particular array of power relations to which it gives rise is identical to those seen under the operational and moral principles of Taylorism. Let me give an example to show what I mean here. As I indicated earlier, under classical LPT it is argued that the obsession with obedience means that the potential productivity of any part of the organization is effectively limited by the performance of the lowest common denominator. Under the rubric of control problematized around knowledge set out here, however, this logic is inverted. Thus, rather than setting productivity targets at the level of the ‘poorest’ performer—or even an ‘average’ performer, for that matter—it is the intention (of managers at least) that targets be set at the level of the ‘best’ performer whose ‘unique’ know-how becomes common knowledge that should enable everyone to improve their performance. Moreover, it is the duty of all employees constantly to seek to exceed these targets—that is, to experiment and innovate in the pursuit of continuous improvement. Bauman (2002) provides us with an interesting insight into how such an array of power is at odds with the inclusive and unitarist rhetoric of
empowerment and teamwork. Far from being a group of equals, Bauman argues that a team’s principal purpose is to serve its ‘strongest’ member. In this way,

... it is no longer the job of the managers to keep their subordinates in line and guide their every move; and if it is still their job here and there, it tends to be resented as counterproductive and making no economic sense. It is now up to subordinates to capture the eye of the superiors, to vie with each other for their attention and to make them wish to purchase services which once upon a time the superiors, in the past the avatar of bosses, supervisors, and foremen, forced them to provide... Employees have been ‘empowered’—the endowment which boils down to bearing responsibility for making themselves relevant to the company. (Bauman, 2002: 34—emphasis in original)

Of course, such vying for the eye of superiors in the pursuit of preferential treatment has always gone on but it is Bauman’s contention that its placement at the heart of the labour process (admittedly not a term that he uses) systematically undermines any vestiges of solidarity that may exist between employees. This leads Bauman to predict that the minute surveillance of employees by managers will eventually fade away in this ruthless ‘open market’ of individual contractors (where competition between peers seems bound to reveal every subtle innovation or improvement possible—cf. Alchian and Demsetz, 1972). I would argue, however, that the fear that even the ‘best’ employees are holding back something from the organization—in this case their ‘knowledge’ rather than their physical effort—is so overwhelming that practices of control will remain, albeit in forms that respond to the changing circumstances of work organization.

Workplace Control as a Discursive Construction

To restate one of this article’s major claims, an advantage of characterizing control as a problem of the indeterminacy of knowledge is that it allows us to retain a critical perspective in the face of the managerial rhetoric of ‘empowerment’. By engaging with the array of power relations that surround the elicitation and representation of knowledge, we can talk about the persistence of domination in circumstances where the fault line of traditional LPT—the continued separation of conception and execution—appears to have been sutured. At this stage, however, I feel it is again necessary to reiterate that this article is not claiming to have discovered yet another fundamental and immutable law of Capitalism. Rather, its much more modest claim is that thinking about control in this way allows us to confront the continued scrutiny of employees, even in circumstances where they are ostensibly trusted to exercise the most meagre levels of discretion to the ‘good’ of the organization.

In going beyond the preoccupation of orthodox LPT with physical effort to embrace ‘knowledge’ work in this way, I am potentially open to

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the accusation that I have simply replaced one idealized Marxist abstraction (labour power) with another equally idealized and abstract category that approximates to Heidegger’s ‘standing reserve’ of knowledge; a fixed resource waiting to be released by whomsoever has the ingenuity and determination to set it free. Such an act would, of course, be at odds with one of this article’s higher order intentions—that is, to situate this discussion of control in a wider context where discourses of management represent systematic approaches to truth claims about what an organization is and how it should be managed. In this way, thinking and talking about control as the elicitation and representation of knowledge is not solely extra-discursive; it has a distinct vocabulary and grammar. As a result, we should consider the following five elements of a discourse of managerial control under conditions of knowledge work:

1. the presentation of coherent and systematic statements about organizational control that delineate our understanding of it and construct its ‘objects’—i.e. what organizational ‘knowledge’ consists in, where it resides, and how it should be pursued;
2. rules which prescribe certain ways of talking about the creation of knowledge and proscribe others—i.e. a justification as to why the elicitation and representation of knowledge is a solution to the problems of effective organization while alternatives are not;
3. ‘subjects’ who in some way personify the discourse—e.g. the ‘knowledge’ worker (and, of course, the ‘non-knowledge’ worker), the ‘resourceful’ or ‘smart’ employee, the ‘good’ team player, the ‘committed’ employee, etc.;
4. how this discourse about the search for organizational knowledge acquires authority—i.e. why one discourse becomes accepted as a representation of the ‘truth of the matter’ while others do not; and
5. the practices of elicitation and representation that not only supply practical knowledge about the organization or production of the delivery of services but also provide the normative basis by which organizational members are expected to regulate their own conduct and that of others—e.g. systems of control, surveillance, coercion, reward, training, teamwork, etc.

Looked at in this way, the discourse of control under conditions of knowledge work displays a different grammar and vocabulary to the discourse of Marxist LPT, while still being an expression of a will-to-power founded on the fear that employees are, in some way, not pulling their weight. As such, it provides us with a means of understanding the continued justification of control and the contingent nature of knowledge in particular organizational settings that, on the surface at least, look very different to traditional mass production—after all, as Tsoukas and Valdimirou (2001) contend, to have a theory of organizational knowledge we also need a theory of organization. I take this to mean that we cannot even begin to consider control in any meaningful sense without linking it
to a consideration of why we bring people from diverse backgrounds and with diverse interests together in organizations in the first place. Which brings me full circle to a question at the heart of any critical treatment of control: in whose name is it exercised? Thus, even if we adopt the Liberal view of the elicitation and representation of knowledge as a neutral technology deployed in the service of all organizational members—a rational means to a legitimate end—as Heidegger (1977) shows, in pursuing this end, we are revealing what we believe to be true in terms of organizational purpose, necessity, and morality. Ultimately then we still have to ask the question: who determines what is the purpose of knowledge and how it is deemed to be useful to the organization; what constitutes legitimate knowledge (i.e. what is to be valued); and, what constitutes illegitimate knowledge (i.e. what is to be discarded or marginalized)? Perhaps the most obvious illustration of the distinction between ‘legitimate’ and ‘illegitimate’ organizational knowledge is the characteristic treatment of ‘whistleblowers’ who, in the course of their job, discover that their employers are flagrantly and systematically polluting the environment, deceiving customers, or avoiding legal responsibilities. Whistleblowers are invariably discredited by their former employers, usually by being labelled as malcontents, trouble-makers, or mad people (Alford, 2001). This occurs even when the ‘knowledge’ they revealed could have saved the organization considerable amounts of money (Johnson, 2003). Knowledge then, like beauty, is clearly in the eye of the beholder.

Moving Conceptions of Control Beyond the Mind/Body Divide

From the foregoing discussion it should be clear that, at its heart, this article displays a Foucauldian slant—what it is effectively doing is making an appeal for a genealogy of workplace control. In drawing an analytical distinction between physical and mental labour, however, it could be argued that I am perpetuating an error commonly attributed to Foucault. For example, Shilling (1993) contends that, in focusing exclusively on discourse, Foucault is bereft of any adequate means of examining the mutual development of the body (or anything material about the body) and society. In other words, although the body is obviously present in his analysis in an epistemological sense [i.e. it concentrates, in the words of Hacking (1999), on how discourses ‘make up’ humans], some critics take it to be absent in any ontological sense. Shilling (1993: 81) puts it like this: ‘As the body is whatever discourse constructs it as being, it is discourse rather than the body that needs examining in Foucault’s work’. If this is a correct reading of the inadequacies of Foucault’s approach then it is indeed troubling if we are to explore the role of embodied actors in organizations, especially since Ryle (1949) disabused us of the existence of the Cartesian deus ex machina. For example, it could also be argued that, in focusing on the discourse of knowledge, organization and control, we are still only getting half the

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story, except that this time it is a different half. By this, I mean that in the same way that Marxist LPT primarily focuses on the physical labour of the human body, the discursive approach primarily focuses on cognitive aspects of labour as if knowledge were completely disembodied, somehow cast adrift from its social and material moorings. This is an important consideration so it is crucial that I demonstrate that Shilling’s concerns are misplaced. Far from being absent in Foucault’s analysis, on innumerable occasions he went to great pains to show that, regardless of the regimes of discipline and truth in operation at any one time, the ultimate site where all power relations are inscribed is the human body. How we understand the effects of power on the body is, however, directly linked to a political economy that purports to show us how embodied individuals can (or ought to) become useful and productive. Indeed, it is possible to make humans work together efficiently and productively only after they have been

\[\ldots\text{caught up in a system of subjectification (in which need is also a political instrument meticulously prepared, calculated, and used); the body becomes a useful force only if it becomes a productive body and a subjected body. (Foucault, 1979: 26)}\]

Again, what constitutes legitimate knowledge in the context of the social relations of capitalist production is bound up with matters of right conduct in capitalist organizations.

Drawing on the work of Gillian Rose, Hull (2000) makes a play of the polysemic character of the word ‘conduct’. Its proximate root in the French verb conduire (‘to drive’ as in a team of horses) obviously resonates with management directly as an external controlling force and also goes to one of its most obvious contemporary uses—to conduct an orchestra. This first meaning is commonly used in management literature as a metaphor implying the coordination of the effort of a number of mutually dependent individuals by a single person. The second meaning, however, relates to conforming to a correct way of behaving, ideally without the need for external reward or sanctions. It is Hull’s discussion of this dual meaning of conduct—that is, the specific external practices of management control and an internal disciplinary force that combine to ensure compliance with certain moral standards—that encourages me to think that making the labouring body the focus of attention in our discussion of knowledge work can help us to maintain the usefulness of LPT. Thus, the mainstream knowledge management literature sets out the exact nature of the expertise that ought to be wielded by knowledge managers (i.e. control enacted in the form of elicitation and representation) and also provides moral guidance for the conduct of employees engaged in ‘knowledge work’ (i.e. that all their efforts—physical and cognitive—ought to be directed towards the ‘needs’ of the organization). Here, the individual labouring body becomes the site where the tensions between ideology and practice are observable. For example, employees who are led to believe that they are autonomous professionals yet have to
deal with the day-to-day practices of tight external regulation can experience frustration and develop unstable and contradictory identities ( Alvesson, 1993, 2000; Robertson and Swan, 2003). Specifically, under Marxist LPT (and its indebted alter, liberal economic theory), the individual becomes rendered useful by subjectification as a mere body only capable of physical effort. Moreover, the need for control (either to maximize effort or to minimize self-interested behaviour) is the ideological means of articulating a will-to-power founded on the fear of free-riding (or, in Taylor’s terms, Soldiering). Ironically, such a mode of subjectification is convenient for both sides of the argument for seeing the employee as an undifferentiated automaton—just another identical cog in the machine—means that replacing recalcitrants should have a minimal disruptive effect. In contrast, there has been a tradition in critical studies of work ( e.g. Gramsci, 1971) of seeking to romanticize the essential physicality of labour along the lines of ‘They might enslave our bodies but they will never enslave our minds’. This can be taken to suggest a form of resistance through the development of a revolutionary class consciousness that would be impossible to close down.6 As one might suspect, given my attempt to show a degree of continuity in thinking about knowledge work, taking knowledge as a ‘standing reserve’ awaiting mobilization by whomsoever has the resolve to capture it is also a mode of subjectification that suits both sides of the Liberal/Radical argument. Thus, a Liberal view would see knowledge as a public good that must be enlisted in the service of everyone in the organization regardless of their position. The Radical view, however, would see the struggle over the ‘standing reserve’ of knowledge as a matter of turning it to the service of the interests of employees before managers can get their hands on it.

Such apparently contrasting views—the purely physical nature of labour and the purely disembodied nature of knowledge—bear an uncanny resemblance to what Popper (1972) called World I and World III. For Popper, World I was made up of physical matter whilst World III was an autonomous realm where knowledge resides stable and fully formed, a universal storehouse of resources inscribed in texts and deposited in libraries that is awaiting anyone who cares to look for it (so long as they possess the minimal mental equipment needed to find and use it). In between lies World II or the world of conscious experience. According to Hacking (1975), at the core of Popper’s philosophy was the quest for a methodology that short circuited World II by seeking a way of apprehending the material world that went straight from World I to World III without going through the messy business of conscious interpretation. But at the heart of the physical world and disembodied knowledge there is a paradox that gives the lie to this kind of thinking and demonstrates that it is toward World II were we should be diverting our investigative energies. In relation to the discussion at hand, this paradox can be stated as follows: through the attribution of intent associated with free-riding or soldiering, we are necessarily acknowledging the exercise of a degree of

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6 Nice Work?  
Graham Sewell
cognition. Likewise, the manipulation of symbols, however abstract, ultimately has a contextualized and directly physical impact that is experienced. This might be through developing a solution to a quality problem in a manufacturing work team that leads to an intensification of work for all your fellow team members (à la Bauman) or through developing a particular way of persuading a customer over the phone to buy a seat on a plane that leads to increased pressure on you to exceed sales targets. In a sense, by taking either abstract labour or abstract knowledge as our starting point in discussions of control, we have been putting the cart before the horse. Instead of taking the object as either the labouring body and showing how control acts on it we need to show how control incorporates a mode of subjectification that shapes how control constructs its objects (i.e. various incarnations of the disciplined body), why it is deemed to be necessary under these circumstances, and when it is judged to be successful or otherwise (Sewell and Barker, 2005). Marxist LPT is perhaps just the most familiar mode of subjectification to be considered by critical scholars in the industrial workplace (as, of course, is liberal economic theory within another tradition of research). My argument is not that thinking about control as the desire to tackle the problem of the indeterminacy of knowledge once-and-for-all solves the shortcomings of Marxist LPT, thereby reinvigorating class consciousness by bringing discussions of domination up-to-date through its extension to ‘knowledge work’. However, it does provide us with a grammar and vocabulary that allows us to counter the words and deeds of managers who, say under the rubric of ‘organizational learning’, wish to render employees useful in an instrumental and rationalized manner. For me, this is where such an approach retains its critical edge. In other words, it is a convincing argument that points to the persistence of control in workplaces where ‘empowerment’, ‘autonomy’, and ‘discretion’ are trumpeted.

Concluding Remarks: Too Much Work, Not Enough Knowledge?

It is, of course, a new conceptual departure to think about knowledge in terms of its social and moral context. For example, the growing literature on ‘communities of practice’ (Wenger, 1998; Seely Brown and Duguid, 2002) has been particularly influential in recent discussions of the patterns of social participation found in ‘learning’ organizations. My approach is, however, more closely aligned with work that explicitly deals with the power dynamics of these processes of inclusion and exclusion or acquiescence and resistance (e.g. Ezzamel et al., 2001, 2004). Nor is it a new departure to think about the physical embodiment of knowledge and there have recently been some fine instances of research on ‘knowledge work’ that have engaged with such matters up to a point (see, for example, Frenkel et al., 1999; Witz et al., 2003). Much of this latter work is indirectly indebted to the ideas of William Carlos Williams (1974). He pre-empted Piaget and Gestalt psychology by several decades
in arguing that knowledge must have an ‘immediate concreteness’ that is assimilated into the entire body instead of simply residing in the ‘mind’.

Williams also prefigured Lacan in arguing that even something as apparently autonomous as words must have an embodied quality: that although there certainly is an extra-linguistic aspect to the world (in Lacan’s term, the ‘Real’), we can only apprehend what we take to be ‘reality’ through a language that is the product of biological processes which are not confined to the brain alone. However, as befits a committed humanist, Williams saw the pursuit of knowledge through the arts, sciences, and professions as a quest for self-actualization. Here, Williams is not unlike Gramsci in believing that contemplation can set us free. Indeed, Williams contended that we can only truly become ourselves through the pursuit of pure knowledge, untainted by ideology.

One of the best treatments that takes Williams’ exhortation to heart in considering the embodiment of knowledge is to be found in the work of Yanarella and Reid (1996), although they manage to avoid his romantic view of its necessarily emancipatory qualities. For them, the body in neither infinitely malleable nor reduced to a set on universal biological needs. Instead, it should be seen as a complex fusion of corporality and technology. To be sure, Yanarella and Reid are political scientists and their coverage of the immense literature on workplace control may look rather cursory to trained organization or management scholars. Nevertheless, it puts a refreshing slant on classics such Taylor and Gramsci, as well as the more recent work of ‘post-Fordist’ commentators such as Womack et al. (1990) or Kenney and Florida (1993). One of the features of this post-Fordist literature is that the demeaning and agonizing toil of industrial work is being replaced by a rewarding and ‘knowledge rich’ employment (Piore and Sabel, 1984; Zuboff, 1988; Barley, 1996). The most recent articulation of this position can be found in the ‘High-Performance Work System Movement’ (e.g. Appelbaum et al., 2000) which continues the now familiar win–win theme. Here, organizations are said to perform better and employees are said to be happier when the latter direct their discretionary efforts (i.e. the fruits of their knowledge) toward the former’s ends. One of the key points that we can take from Yanarella and Reid’s discussion is that this post-Fordist literature, with its mythologization of self-determination and discretion, is the logical obverse of the instrumental rationality of Taylorism. Indeed, with his desire to banish all independent thought on the part of employees, we can see that Taylor was only half-joking when he called for the creation of a workforce of ‘trained gorillas’. Considered in this way, it becomes clear that, while approaches like post-Fordism qualitatively and quantitatively overestimate the knowledge content of much of today’s work, Taylorism qualitatively and quantitatively underestimated the knowledge content of traditional work. On the one hand, a reported increase in the number of knowledge workers belies a degradation in the nature of some activities always considered to be knowledge work (e.g. Nice Work? Graham Sewell
the deskilling of some professional activities) and, on the other had, simultaneously ignores the cognitive demands that have always been placed on many employees in traditional forms of employment (Thompson et al., 2001; Fleming et al., 2004). Moreover, this is a happening at a time when many employees’ positions in an economy of power are becoming more marginalized and precarious as the so-called knowledge economy continues to exhibit the same cruelties pointed out several years ago by Garson (1988). In sharp contrast to optimistic views of the ways in which knowledge work will shift the centre of gravity of power away from employers back toward the ‘new’ worker—a sort of highly skilled cyberwarrior who sells their knowledge to the highest bidder and who holds all the aces—many will find themselves in changing but equally exploitative relations (cf. Bauman, 2002). This perspective goes beyond the traditional manager/worker or boss/bossed oppositions for, if my interpretation is founded on one single premise it is that we are all knowledge workers now (indeed, we always have been), whatever our nominal position in the fabric of power/knowledge relationships in contemporary organizations. For me, what is most interesting is neither the numbers of occupations that are now labelled as knowledge work, nor the numbers of workers who would claim allegiance to these occupations. Rather, it is the way in which knowledge is elicited, represented and, ultimately, rendered legitimate in the complex unfolding web of control, subjectionification, power, and resistance that accompanies each specific example of work organization. Contrary to popular belief, this does not constitute a ‘discourse of despair’ that imperils the very idea of social change on the grounds that we are impotent in the face of overwhelming power. Far from it, in fact. Insofar as the knowledge economy is a ‘real’ phenomenon, it demands that we begin to map out those complex relations of power, control, and subjectionification that it entails so that we can challenge the ideological foundations of developments such as post-Fordism, teamwork, or high-performance work systems.

Notes

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1 To illustrate his point, Heidegger (1977) uses the image of engineers thinking of the River Rhine solely in terms of its potential as a head of water, standing by waiting to supply turbines with the impulsive force to generate electricity.
This strongly resonates with human resource management approaches that advocate a ‘heart and soul’ commitment to the organization.

Of course, since the inception of the Human Relations School, we have been alert to the idea that this was not just a one-way process. Peers have always indulged in informal work restriction and the disciplining of ‘chisellers’ and ‘rate-busters’.

The *deus ex machina*—literally the *god from a machine*—was a piece of stage machinery used in ancient Greek drama to suspend actors above the stage so that they appeared to the audience as gods floating in space. Ryle, however, offered his own translation as the *ghost in the machine*. He used this as a derogatory term against those who believed, after des Cartes, that the human mind was an entity separate from the human body.

This is very close to Alvesson and Kärreman’s (2001) discussion of the two domains of managerial intervention where managers seek to establish workers’ norms and to direct their behaviour.

It is no coincidence that Gramsci’s thoughts on this were penned in prison. The contemplative freedom of the mind contrasted against the incarcerated body has long been a feature of prison literature (Sewell, 2001).

Although Williams formulated his ideas about the embodiment of knowledge in the earliest decades of the 20th century, they only existed in fragments that were not pulled together in a systematic form until 1974.

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