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## THE SEE-SAW OF MANAGEMENT FADS:

# Remarks towards a dialectical description.

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#### THE SEE-SAW OF MANAGEMENT FADS:

Remarks towards a dialectical description.

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#### ABSTRACT

It is a common perception that the history of management discourse involves an oscillation between dualistic faddish perspectives. This paper, which derives its theoretical impetus from Marx and Wittgenstein, seeks to outline a philosophical, sociological and psychological diagnosis of this see-sawing process which avoids the dualism and logocentricism that dominates both fads and much of the criticism of faddism. Through abandoning dualities, we may develop more meaningful concepts of 'knowledge', 'organisation' and 'process'.

#### MANAGEMENT FADDISM

There has often been concern about whether any new knowledge is being created about management of organisations. One perceives a persistent cynical sense of déjà While there are no shortage of elegiac editorial pronouncements about the vu. constant rise and fall of management fads the process seems unstoppable: the latest fad comes along, gains briefly in popularity, only to be shown to be a failed attempt to recycle old ideas (Wensley 2002; Brownline 2001). Research into management fads has uncovered a regular pattern, a bell curve of meteoric rise and rapid dissipation (Pascale 1990). Some researchers have gone so far as to develop a five stage model, so concerned managers, trainers and consultants can assess where the latest buzzwords are in the fad-cycle (Birnbaum 2000). Others regard management discourses as better understood by analogy with fashion and fashion-setting practices. (Abrahamson 1996). Even management gurus themselves acknowledge their tenuous status as fashion icons. As Michael Hammer, the former BPR celebrity observes ruefully. 'Business ideas follow the same trajectory as Hollywood stars: Stage one: Who is X? Stage two: Get me X! Stage three: Get me a young X! Stage four Who is X! (Pink 2001, p.113).

Given widespread consciousness of the phenomena of rising and falling fads, of constant change and nothing changing, why does the problem persist? Managers blame consultants for selling them panaceas and consultants blame gullible managers, for taking a good idea and turning it into a panacea, while corporate trainers pen temperance tracts imploring consumers to "Just say no to fads", pointing out the ruin that fads do to employee morale, and the credibility of management (Caudron 2002). But still, despite all this breast-beating about faddism, management can't seem to hit the addiction. Why? Is it just a question of keeping up with the latest fashion trend, to be seen as progressive trendsetters in the eyes of key stakeholders? Maybe managers are just acting out of boredom (Huczynski 1993)? Perhaps the reason is corporate history of the failure of past fads? Perhaps in the environment of stock options and executive payouts many don't have to stay behind to pick up the pieces anyway, so can afford to indulge themselves.

All of these are possible reasons but what *sort* of reasons are they? A \$20 billion management fashion industry producing so many flops needs some explaining. And this should involve something more than questions couched in the forensic tone of 'Why did he *do* it?' Criticisms of faddism often seem like nagging the manager the 'morning after' when the product already appears a failure and hence one's reason for purchasing it –fashion, boredom, gullibility, also seem like mistakes. Management faddism as a conceptual object tends to immediately trivialise and conceal the object of discussion. A 'fad' is a management discourse already being screwed up and thrown away as refuse. In a similar way the notion of management 'fashion' seems to externalise and trivialise the product, and one's relation to it: fashions like masks are means of both external display *and* concealment.

It is important to consider the kind of discursive agenda such terms set up. Management faddism suggests a qualitative contrast to management theory. It suggests an unworthy product, shoddy goods, something its producers should be guilty of producing. Debunking fads involves a labelling practice, which demarcates and directly implies its quarantined opposite- *proper* 'professional' management approaches (Hilmer & Donaldson 1996). Proper approaches to management seem as related to fads as sobriety is to drunkenness. For this reason, a discussion of faddism that gets behind this agenda should consider the theory/fad duality that defines faddism as an object of discussion, not take it for granted.

#### **BPR** as a Fad

A recent example of the theory/fad duality is provided by the demise of Business Process Reengineering (BPR) and the general character of the criticism of faddism that accompanied it, which was also a process of the construction of BPR as a fad. As in any trial the character and personality of the accused - in this case Hammer and Champy's aggressive evangelical style, the violent language used in their tracts, the uncritical enthusiasm of their disciples - sets the tone (Grint & Case 1998). And of course there are the misdeeds of the accused. A claim that 70% of BPR initiatives result in failure is regularly quoted as well as the conspiratorial involvement of BPR in organisational downsizing, and massive job cuts. Its apparent association with others 'known to police' such as 'taylorism' doesn't help its case (Knights & Wilmott 2000). But the main thrust of criticism of BPR stresses its 'one sidedness'. The nature of fads, including BPR is that they are extreme, one-sided and dogmatic. Specifically 'most BPR empirical literature emphasises change based on one aspect of an organisation' everything is reduced to process 'with inadequate treatment of the human aspect'. 'BPR over-focuses on process but ignores the behavioural change as the key to organisational success' (Cao, Clarke & Lehaney 2001, pp. 334-5). The persistent refrain is 'neglect of the human dimension' (Wilmott 1994, p. 35) the human factor is not 'taken into account' (Valentine & Knights 1998, p. 80). Biazzo condemns BPR as 'a simplistic vision of an apolitical organisation' which 'offers an unacceptable representation of the complexities of organising' (1998, p. 13). What is condemned is what is extreme, one-sided, simplistic, ignoring the human factor, which implies that a proper management approach should be balanced, holistic, multifaceted, complex and inclusive of human and technical factors.

The key question here is not so much the truth or otherwise of these allegations but the discursive agenda this critique of faddism comprises. Dualities involve a practice of drawing distinctions between what is acceptable as opposed to what is unacceptable. What is involved is a language game, which presupposes a particular value is assigned to terms. One's response here depends on how one is disposed to react to words like 'holistic' as opposed to 'simplistic', 'human' as opposed to 'technical' factors. One could just as easily imagine another language game, defining different court proceedings where the roles were reversed, with 'holism' in the dock. But the main problem is how this kind of critique of faddism lets the accused off anyway. What is required is only a mock execution. None of these criticisms, as vehement as they seem, condemn BPR for its actual conceptualisation of business process, only for what its concepts leave out - the human factor. BPR is condemned for overemphasis on the process; reducing the analysis of the organisation to its processes. It is condemned for its sins of omission, not sins of commission. All of which suggests the obvious conclusion. If the problem with BPR is just dogmatic over-emphasis on process, then the faddish aspect of BPR can be put down to Hammer and Champy's guru-speak. BPR can be rehabilitated if we include in the

analysis of technical processes a role for mediating socio-political processes. Bring the human factor back in and then surely everything will be right. This is ultimately where this kind of criticism of BPR leads. For BPR is by no means dead and buried. With a new more human face, BPR, now called Business Process Management (BPM) or Business Process Improvement (BPI), is alive and well; its practitioners continue to sell their workflow analysis tools in the marketplace. According to Cao et.al. (2001) a duly chastened BPR should be integrated as one perspective into more holistic balanced technology/people approaches. Biazzo agrees that the BPR perspective should be absorbed into more comprehensive approaches based on sociotechnical systems (Biazzo 2002).

As we can see, there is a process here whereby the problem of faddism is perpetuated. The 'other', the 'unacceptable', is a required part of a duality, since it defines one's own perspective. Critique of BPR's overemphasis on technical rationality, simply involves shifting ones perspective to an emphasis on normative rationality. That is the way the critic can see BPR's neglect of socio-cultural and political factors. This seems to fix things because it rights the imbalance and suggests the possibility of equilibrium through inclusion of this technical approach within a putative holistic consensus. But what is happening is only a shift of the balance. It is not a movement which can resolve anything, because this critique of faddism never deals with the basic issues, which concern not so much BPR's over-emphasis on process but its 'generic' concepts of process per se. This is what is wrong with BPR: the inadequacy of its concepts from its own 'technical' perspective. They lack substantive content, as definitions of processes, whether they have people in them or not. And this is not just BPR's problem. Hammer and Champy and Davenport used concepts and definitions of processes common in every operations management and IT systems undergraduate textbook. A critique that deals seriously with fads like BPR needs to deal seriously with 'process' concepts basic to orthodox operations and IT management theory as a whole. The emphasis on 'imbalance', as if the real problem is failure to 'include' socio-political factors, actually frustrates a clear focus on the real 'technical' issue. And this in fact is what happened. Analyses of the nature of business process during the hey day of BPR in the 1990s were 'exceptionally scarce' (Kock & McQueen 1996, p. 8). Even today the obsession with generic concepts means little work has been done on developing process concepts capable of speaking to the concrete forms of actual processes, and in particular 'service processes' (Bitici & Muir 1997; Giaglis 2001).

#### The 'Generic' Concept of Process.

So what is the BPR concept of a business process since this is precisely what the theory/fad duality seems to conceal? A business process can be defined as 'a set of logically related tasks performed to achieve a defined business outcome' (Davenport & Short 1990, p. 12) or a process is 'a black box that effects a transformation taking in certain inputs and turning them into outputs' (Hammer 1996, p. 9). These definitions are virtually identical to those one finds in common operations management texts. According to Slack, Chambers, and Johnston, 'operations processes take in a set of input resources which are then used to transform something or are transformed themselves into outputs and services which satisfy customer needs' (2001, p. 9). These transformation processes are explained as consisting of macroprocesses which consist in turn of micro processes.

Wittgenstein says 'we sometimes demand definitions not for the sake of their content but of their form' (2001, s. 217). There are no better examples than the above. For the definition of a process we are directed to sub-processes and tasks. And how are these sub-processes defined? The question is not answered just referred elsewhere. The tactic works only if it is able to wear the questioner out. The purpose of the answer is to stop questions. Such definitions of the process are just a chain of terms. We are just substituting one term for another term. What is a process? Well, is it is a group of tasks. And what are tasks? Well, they are a group of activities... Eventually the chain of terms is simply broken off, though it appears we are dissolving something of great generality and importance down into its constituent components.

This is the basic thing to be said about BPR and what it is supposed to be reengineering, and operations management and what it is supposed to be managing. Ultimately the generic definition of the process is just the frame around a vacuum. All we can see are the inputs and the outputs. But the transformation process is merely postulated. It is quite magical and speculative as the name implies. Even the staff and the resources as we see in the diagram below are shifted holus-bolus out of the black box so they can be regarded as inputs that are defined by outputs. Strangely, the procedure if it works at all requires us to deduce a process from the perspective of what must have happened not what actually happens in the black box.



FIGURE 1 The Input-Transformation-Output Model (from N.Slack et.al.2001)

The catechism of customer sovereignty is fundamental to BPR but also to *proper* management theory as a whole. All roads lead to and from the customer. But this litany is theoretically essential, since only a predetermined already known customer need embodied in a product allows one to retrospectively fill in and thereby theoretically elide the steps-which must-be-taken, rendering the content of the process unproblematic. Only given this *a priori* requirement can one get away with an approach which is essentially reactive, in which the active 'transformative aspect', the

content of the process, is actually omitted from the 'explanation'. But by the same token it is also the reason why the critique of BPR in terms of what it leaves out is also vacuous. For how can we add an active human component later on to definitions in which activity per se, not just human but even machine activity, is absent; in which the process is only the 'black box' which is implied by the already given logic of the process? What sense does it make to say that we can *add* such technical 'perspectives' to 'people' perspectives?

#### THE PROBLEM OF DUALITIES

The 'holistic integrationist' critique of faddism involves the assumption that the critic is taking a perspective in the centre of the see-saw through the addition of different perspectives. This belief in an approach, which balances on the one hand 'concern' for technology and on the other hand concern for people, is perhaps the dominant management ideology which informs 'systems' approaches to be found in most management text-books. It is, however, this notion of a sort of unified field theory of management, with all its emotional appeals to notions of 'balance' and 'tolerance' that perpetuates the problem. Faddism is not an aberration but something, which is contained within orthodox proper 'systems theoretical' approaches. The term 'properness' is used because this position is not so much theoretical, but defined by deviance avoidance. Proponents of this holistic balanced position only talk about holism. For this solution to exist, duality must exist. Incompatibilities are ignored as a foundation for consensus. Causal 'black holes' in core concepts are allowed to persist. And these are widespread in management theory, including basic RBV concept of 'resources' in strategic management (Priem & Butler 2001). Holism entails duality: it is just one in a series of receding mirror images.

#### **Knowledge Management**

There is game being played here. Once again in the case of Knowledge Management we can see the outlines of our see-saw again. On the one hand there is the technical/rational position of those wanting to see 'knowledge' as an objective entity reducible to data and rules for deriving information from data, and knowledge supposedly from information. Largely coming from IT 'hard science' backgrounds they want to promote the possibility of digitising the organisation and providing managers with point-and-click remote control over processes (Bollinger & Smith 2001). They are opposed by others largely from HR 'soft-science' type backgrounds, who fearful of this rationalising juggernaut, stress the dynamic 'indeterminate' or interpreted nature of knowledge as inherent in shared experiences and practices (Prichard, Hull, Churner & Willmott 2000). They feel the need to stress a duality, a limit between 'explicit' and 'tacit' knowledge, which means that managing knowledge is not about technology but facilitating 'organisational learning' (Raub & Ruling 2001). This movement in the normative direction then suggests the possibility of various holistic schemes, which involve arguments for combining dual perspectives in the same way that modern physics combines perspectives of light as both energy and matter (Hargadon & Fanelli 2002; Diakoulakis, et.al. 2004). This appears to conclude the debate but it simply leaves the duality as it is and never gets down to the

real question: the critique of the duality itself. For what sense does it make to regard 'knowledge' as either 'explicit' or 'tacit'? Again much depends on the *value* one places on these terms which distracts us from considering what sense the question 'what is knowledge' makes anyway, and what we are doing when we regard it as *essentially* consisting of either practices or rules? Does the duality help us or does it in fact cut us off from a description of the ordinary forms knowledge takes in organisations? Similarly, the question 'what is a process' encourages us to provide a mental representation of *the* process as consisting of different elements (inputs outputs, roles, tasks, activities), which immediately remove us from providing a descriptive morphology of actual processes: teaching, hairdressing, blending, baking.

What is being questioned here is whether the see-saw of fads is created by the answers we are obliged to put to the questions we keep posing. Dualities are the way we organise the answers we put to essentialist questions. A duality arises as soon as we try to define the generic concept of 'knowledge', 'organisation', or 'process'. Saying knowledge is an object implies its opposite, the 'other', like a shadow, as though a contrast is required to see something clearly. With the duality, however, our focus is distracted. The complete essential understanding of phenomena we were looking for has escaped us. We are then liable to reject positivism falling under the relativist illusion that this duality we have created is real when it is a product of our own minds. Grammatically speaking it is not clear how propositions that knowledge consists of X or Y (or X-Y) are actually different. Similarly we must question what the substantive difference is between technical rationalities which objectify an organisation as a 'machine' or a computer 'program' and normative ones such as 'organisational learning' which regard organisations as 'minds', 'as cognitive entities, capable of reflecting on their own actions' (Boudreau & Robey 1996, p. 47). The invocation of contrasting terms like rational/normative mechanistic/organic does not diminish a common procedure whereby the organisation is constructed by the very questions we ask as a 'generic' mental representation, which appears to us as an abstract object through which we could predict and control organisational behaviour. Questions presuppose answers. From this perspective dealing radically with faddism requires a critique of the questions which create the problem of duality and therefore the need for holistic 'solutions'. Instead of trying to find a fictitious position in the middle of the see-saw, why not simply get off it?

#### **The Normative/Rational Duality**

A dialectical approach is critical of sham holistic solutions. But it is also critical of approaches which argue that management discourse is characterised by an underlying *irresolvable* dualism. This celebration of 'difference'; this tendency to postulate *apriori* contradictions and dualities is commonly met in post-modernist discourse. But it is also just another position on the see-saw. Post-modernism has a tendency to behave like the naughty child that likes to accentuate opposites as opposed to the modernist sensible one that wants to 'include' them. A dialectical approach, on the contrary, problematizes sameness and difference since it is a therapy which seeks to show how the see-saw works – so we can get off it.

Such a therapy requires not just a logical but a socio-historical critique of our see-saw: how it is produced and reproduced. Here we would like to briefly consider Barley and Kunda's influential account of the history of American management discourse. They explicitly reject the notion that the history of management discourse should be seen in terms of 'progress', and hence the possibility of a holistic socio-technical consensus. For them the history of managerial discourse has always consisted of a continuous alternation between contradictory approaches that emphasise *rational* control and those that emphasise *normative* control (1992, p. 363). However the problem with this approach is the tendency to postulate dualities as real rather than treat them critically.

Barley and Kunda regard all managerial discourses as generally about the different forms in which legitimacy is sought for management control. The rational approach is identified archetypically with Taylor's scientific management with its emphasis on workers as instrumental economic agents whose behaviour is a mere epiphenomena of process. The 'normative' is identified with a raft of approaches which regard behaviour more as an independent variable requiring an explanation in terms of socio-psychological variables or in terms of culture. The primary intention is to use this concept of normative versus rational approaches to develop a narrative that groups together patriarchal social utopian experiments of the Owenite type, Mayo's group psychodynamics and TQM style enterprise culture as examples of the normative surge, while scientific management systems theory and presumably business process engineering represent surges of the rational kind. This results in a logical account of the history of managerial discourse as the oscillation between these underlying control strategies; in terms of a 'continual wrestling with counterpunctual themes' (1992, p. 364).

As a description of ideological movements of the see-saw there is much to recommend their account. But they have difficulties with the attempt to emphasize dichotomy. Scientific management was never a unified movement nor was the socalled Human Relations School. Almost from the beginning there were disputes and differences of a rational versus normative character within these 'movements'. Taylorists became some of the keenest advocates of worker participation initiatives, human engineering, and ergonomics (Nettle 1990). Within the 'human relations school' the normative'/rational split can also be seen in the contrast between 'mayoists' and 'interactionists' (Mouzelis 1975). Similar differences can be seen within the quality movement in disputes over the role of statistical methods versus cultural interventions (Nettle 1995). TQM is less clearly an example of the normative surge than of contested terrain. Many TQM gurus, particularly Japanese ones, were constantly alarmed at the Deming style assumption that TQM was somehow at odds with traditional taylorist practices (Nettle 1995). In addition, the attempt to sharply define ideological 'surges' from each other tends to dissolve the important role of holistic approaches as well. Barley and Kunda give insufficient regard to these quasiintegrationist approaches, such as socio-technical systems. and indeed systems/contingency approaches. The attempt to tip systems theory as a whole into the 'rational' basket, really just excises at a stroke the real opponents of a dualistic approach, as well as being unfair to the genuine belief in some sort of 'middle way'.

But the real problem of their account is the failure to account for the duality itself. An explanation is required of the nature of the contradiction between rational and normative approaches which *necessarily* cause a state of perpetual tension. Why *can't* an acceptably holistic approach be developed? But so far as an explanation of this *cause* is concerned, Barely and Kunda simply refer the dualism they postulate at

the level of management discourse to an apparently deeper dualism in Western culture. What makes these normative and rational rhetorics opposites, is that they are 'rooted in cultural antinomies fundamental to all Western industrial societies'. These antinomies are seen as inhering in 'the opposition between mechanistic and organic solidarity: between communalism and individualism' (1992, p. 63). Rational rhetorics rise because they promote individualist instrumental calculation and fall because this creates alienation and undermines group loyalty and cohesion. This promotes the rise of normative rhetorics which constrain management action and promote non adaptive group thinking practices, setting the conditions for the rise of rational rhetorics (1992, pp. 376-80).

Here we can see the method of moving the 'explanation' to higher levels that we saw in the case of 'generic' definitions of process. All we are doing is substituting rational for individualist and normative for communalist; 'surface' contradictions for 'deeper' antinomies. There is still no explanation of why there *must* be antithesis or correspondence between the rational/normative and the individualist/communalist duality. And for good reason. Empirically, it is hard to show that Taylorism's demise was because it necessarily resulted in 'individual atomisation' and the destruction of collective organisation. Rather than 'individual atomisation' new forms of group structure centred on power within the process and new 'industrial' unions, replaced more traditional demarcations based on skill qualification (Littler 1978). Rather than putting the workers' knowledge into managers hands 'deskilling' processes create new cadres of skilled workers, like systems engineers: skills are just shifted elsewhere, often out of the firm itself (Nettle 1990). According to Offe (1972) rationalisation increases 'task discontinuities' in organisations thereby increasing the distance between the knowledge managers have and what they need to effectively manage organisations. At the same time it must not be forgotten that in many cases the new 'rational' methods actually had little effect on the group structure at all, precisely because management never allowed scientific management to operate as a system. It is seen more commonly as the half-hearted application of isolated fragmented techniques: time measurement, methods analysis, costing standards (Fleischman 2000; Nettle 1990). While Ford's assembly line is often seen as the apotheosis of Taylor's technical rationality, it is easy to forget that the Fordist model only ever accounted for a small minority of manufacturing processes (Hirschhorn 1980)

Barely and Kunda's argument, which entails the emphatic *stressing* of duality, excessively highlights the differences between and within ideologies and thereby also overestimates their consequences. Is the oscillation from normative to rational rhetorics caused only by the *consequences* of their implementation? On the contrary the overwhelming evidence we have is of the mundane inability or failure to implement these ideas in practice (Carlopio 1998, pp. 1-2). Management don't implement them fully or consistently, or they try only to have it reversed by the next manager, or they don't know how to implement them because the discourses lack workable methodologies, or because there is such a confusing plethora of different methodologies all claiming parentage from the same 'theory'. What we see in organisations, often in deep archaeological layers, is a clutter of half-baked implementations of TLAs (3 letter acronyms). And as for resistance, frequently it is not so much workers as managers who are credited with providing the greatest

resistance to methods supposedly designed for managers, to maximise management control (Waddell & Sohal 1998; Pardo del Val & Fuentes 2003).

While managers have always been attracted to the *image* of technical rationality, they are not necessarily attracted to the *reality*, precisely because of the extent to which a rational technostructure, if it were implemented, would undermine management prerogative; which is ultimately the 'freedom' to act outside of rules while requiring others' behaviour to be rule based and predictable. Arguably Taylor's greatest opposition came from top management fearful of how a scientifically managed engineering technostructure, would have exposed to objective scrutiny the machinations of old-boy networks (Nadworny 1955). Managers often compromise the implementation of technical rationality themselves because in the final analysis it is not necessarily in their interest to alleviate the 'need' for crisis management and the opportunity to demonstrate charismatic leadership (Nettle 1996). The arguments that rational methods *must* induce alienation or that normative methods *must* induce group-think is basic to old wives tales like Theory X and Theory Y. But they are arguably convenient pretexts themselves which a manager can use to jettison a program that might seem to work all too well yet encroaches too closely on management prerogative.

As Connell and Nord (1998) have observed Barley and Kunda's account is limited because it is only an ideological account, not a sociological account of the see-saw. As a result it is easy from this perspective to overestimate 'management interest' in the reality of rational or normative control as opposed to their interest in the *images* of control which these rationalities project. It is easy to overestimate the effectiveness of management discourses in practice, and hence deny any space for an analysis of social resistance (Knights & McCabe 2002). What results, unfortunately, is a shift from the historical analysis of social agents constructing discourse to metaphysical cultural absolutes determining social actors. This shift is largely responsible for their concluding pessimistic observation about the producers of managerial discourse being mere 'cogs' in a machine, since the process at the level of managerial discourse becomes simply the outward expression of a supra-social cultural clock mechanism. In this way Barley and Kunda's *normative* explanation of the rational/normative duality is also a part of the duality.

#### A DIALECTICAL DESCRIPTION OF THE DUALITY

Here we can see how the proponents of holistic and dualistic positions end up back in the same bed. They both force down the balance on the normative side: the former in order to correct an imbalance and arrive at rational consensus, the latter in order to stress differences because they reject the possibility of rational consensus. If we reject a position on the see-saw, however, what explanation can be provided for the oscillation of management fads? While the answers can only be sketched out programmatically here, they are basically of two kinds.

The first involves a socio-historical dialectic which seeks to avoid this tendency to naturalise the normative/rational duality, lending it the mantle of an apparently logical basis. Barley and Kunda's concept of the duality is useful but only as symptoms are useful in treating an illness. Logically and empirically the duality is problematic, and can only be sustained with difficulty through the social practices that

reproduce it. But here we also need to avoid overly differentiating ideational structures so as to make them directly represent social interests. (Waring 1996; Shenhav 1999). On the contrary we want to make the *lack* of clear differences between 'schools', and the prevalence of hyphenated approaches more central to our focus, rather than feel we must treat the muddiness of reality as a difficulty needing to be tidied up. No sensible advocate of 'rationalist' approaches ignores 'normative' approaches or vice versa, while simultaneously there still are professional practices always trying to maintain the differences. This is the dynamic of interest because the nature of the see-saw is its *perpetual* motion. It is not a question simply of clearly conflicting social interests since there are common interests in maintaining the duality: otherwise there would be progress and transcendence which as Barely and Kunda rightly observe – there isn't. So our socio-historical analysis should describe both the conflicts that push the see-saw down, creating differences, upsetting the balance, and the common interests that keep righting it, smearing the differences over again. What are they?

#### **Intra-professional Conflicts**

Following Gottdeiner (1993) the oscillation of fads can be related on the one hand to conflicts within the professional management structure over the knowledge that is foundational for business strategy. Management professions have interests in sustaining the rational/normative duality, in spite of the basic similarities between these approaches which is continually making them blur into each other in practice. On the one hand the conflicts relate to Marx's dialectic of commodity production which entails different and opposing kinds of professional knowledge: broadly, the knowledge which is involved in the production of use-values (production engineering), and the realisation of exchange value and its circulation (marketing finance) (Marx 1973, pp. 402ff) Pressure to maximise exchange value, requires products and their operational capacities (use-values) to be flexible; ideally openended. From the perspective of exchange value, the qualitative features of use-values are ultimately irrelevant, an encumbrance: one use-value is as good as another (Marx 1972). But if exchange value dominates the relationship, product failures, and customer dissatisfaction result, because use-values unlike promises are finite and qualitative. Competition tends to stretch the connection between exchange value and use-value causing the conflicts that routinely inflame relations between production and marketing or snap in the larger crises for the firm or the economy. But this centrifugal pressure is contained to the extent that institutional and regulatory pressures combine to enforce consistency and limit the scope of competition. Within organisations HR mediates this contradictory relation and its impact on work relations.

In this way business processes themselves entail requirements for contradictory kinds of knowledge. At the same time intra-professional conflicts also have origins in the social institutionalisation of knowledge and how this relates to the hierarchical organisation of professional management in relation to the business. Basically, in Anglo-Saxon countries (unlike Japan and Germany) production and production support functions (production, engineering, HR) have always been more devalued in terms of pay and status than marketing and finance functions which were often those that historically were retained by business owners and contributed more to business strategy (Carchedi 1977; Skinner 1992). From this dual account the normative rational ideologies which Barley and Kunda make the *sole* pivot of management discourse are largely the projects of professional 'outsiders' (engineering, IT, HR related professions) seeking to improve their status through constituting their professional knowledge as having a *strategic* value for the management of the business. (Layton 1971; Meiksins 1984; Murray 1991). Whereas the role of these advocates has always been offensive, marketing and finance related disciplines (the insiders) have been more defensive or more concerned to accommodate the ideas of these outsiders. The debates between CRM (Customer relationship management) and ERP, provides an example of marketers trying to preserve own ' black art' legacy systems from incorporation into an IT dominated technostructure (Siragher 1999; Payne 2002). Similarly, fragmentation of the scientific management movement was assisted by accountants efforts to accommodate and appropriate these tools from the engineers (Armstrong 1984) This defensive posture may account for the relative absence of these disciplines in the initiation of new management discourses within the rational/normative dichotomy, while they have always dominated the formulation of strategic management.

#### **Conflicts Within and About Professional Management**

But the dialectic in this account depends not only on intra-professional conflicts but also on the countervailing impact on professional management class projects of the common issues, that concern management prerogative as a whole, but particularly senior executive management. While professional management outsiders are trying to constitute their knowledge as foundational for strategy and therefore create the differences, and insiders are muddying the waters through process of accommodation, senior managers have concerns that relate to the rationalisation project as a whole, interests which also coincide with professional management groups, and often involve populist appeals over the heads of professional management to employees. These common interests concern whether management should be regarded as objective rational knowledge at all or whether it ultimately inheres in inscrutable arts of leadership. There are two debates which overlap. There are conflicts within professional management and *about* professional management. The debate over management - is management an art or science? - has always been a perennial theme in managerial practice (as reflected in debates within management organisations) and overlays debates in the academic management literature about the appropriate form of rational control (Nettle 1996). Management ambiguity and contradictoriness over the nature of management authority is the fulcrum for an account of both the attraction and repulsion from normative/rational rhetoric, and is a fundamental dynamic affecting these motions of the see-saw of management fads.

Further complications occur because management discourses themselves have to be produced and enter the market place and gain exchange value as knowledge commodities. They are not normally produced *by* managers but *for* managers. Reaching the market entails complex interrelationships between consultants and academics, professional institutions, and a professional management constituency. Management discourses are sustained through such networks but are also transformed by them into products which in turn gain respectability by becoming subjects in management courses (Birnbaum 2000). Much of the 'faddism' which is perceived by management fashion-writers, is the result of 'product differentiation' and 'brand

development' applied to knowledge products by consultants and practitioners. The lack of definitional and methodological consistency of fads such as BPR and TQM which critics most complain about (Choi &Chan 1997; Valentine & Knights 1998) is really unexceptional once we understand them as commodities where the major issue is rapid market penetration, not internal theoretical and methodological consistency. Controlling the form of the product, preventing uncontrolled proliferation of service options and variations, is a problem generic to service providers simply because we are always dealing here with language based artefacts which are so much easier to modify, misunderstand, or misinterpret. Also universities particularly in the US are closely linked to the consultancy industry, so there is less constraint on knowledge purveyors adding and subtracting and modifying their products for new markets with little regard for academic concerns with consistency. On the contrary business schools themselves are turning into supermarkets where the dominance of paying 'customer needs' results in similar production and marketing processes that one sees in the consulting community (Ritzer1999).

#### **Dialectics of Consumption**

Apart from a socio-historical description, however, we also need to consider a second type of dialectic. This concerns less the institutional issues surrounding the production and distribution of discourse, but more the social-psychology of the consumption of management discourse as part of managerial practice and how this affects the commodities form in a way that produces a discourse as a 'fad'. Here we should touch on the distinction we made between the image and the reality of rational control. The argument here is that the 'mental representation' of control is at the centre of the interest managers have in a management discourse. It is what maximising exchange value means for the content (use-value) of a management discourse. As Gabriel (2003) observes managers' orientation to ideas are tactical and opportunistic involving a haphazard process of *bricolage*. Customers want management discourses that, like recipes, can be easily understood as a set of steps or prescriptions but are also loose enough that they can be manipulated, adapted and modified for particular problems or by the same token easily discarded. No one wants to be stuck with debts of loyalty and organisational commitment to particular technologies in a climate of rapid technological change. Ideas, like buildings, are better leased. But behind this cynical detachment is a particular determinate set of needs. While the purveyor of management knowledge is trying to constitute management problems in terms of their own professional knowledge, managers have positive interests in only one thing: does it 'work'? And whether it 'works', solves 'problems' as we have indicated above, is determined not necessarily by whether it can be implemented. Rather it is determined by how this knowledge interacts with the problematics of management prerogative, with how it can make the manager *feel* in control of a situation.

#### **Social Network Analysis**

Let us consider an illustration. It concerns a report by a consultant on a very successful session with senior managers where they were introduced to a new technique Social Network Analysis (SNA). SNA has its own baggage of justifications for normative control approaches but this does not need to concern us as it did not concern its customers. According to the consultant: 'senior managers who have a

difficult time with concepts like knowledge management and collaboration have no trouble at all with SNA. Data draws them in and the diagrams feed their leadership creativity" (Anklam 2000, p. 10). What works is the charts which show the amount of information that flows between people in a network. Managers presented with these diagrams 'quickly correlated the current state of the business to the lowest percentages' and began to interpret poor showings in sales with infrequent communications between groups'. In other words SNA made the managers 'sit bolt upright in their chairs' to the extent that it appeared to draw a simple unmediated direct cause effect connection between problems (poor sales) and quantity of communications. While the consultant avers that 'we should not dwell too much on numbers', and that the numbers only show 'patterns and places to ask questions', she also notes the data are 'tuned for impact', in such a way as to appear to present the managers in outline with a lever for action (Anklam 2000, pp. 10-11). Because the modern sophisticated consumer wants interactivity, because the managers want to choose themselves, the consultant is careful to construct SNA in a way that makes them feel in control. Putting together an effective TLA is like crafting an exciting computer game. What matters is not a theory or even a method for solving problems but rather a *presentation* which draws the managers in, which leads the managers on to fill in the dots themselves, and in doing so mentally consume the product as a problem already solved. Game Over!

As we can see from SNA, it is very important for the producer of commodities to be clear about what is being sold; to be clear about the exact nature of the transaction, and fine tune the use-value to mimic the transaction. Crucially, it is important not to swallow one's own hype about selling solutions or methods per se, that is not where the sale is clinched. The critical locus of customer need is the manager's own selfidentity as a subject able to make decisions and solve problems in relation to an object, and how the 'tools' provided by the discourse appear to construct the conditions for this relationship and hence for managerial self-actualisation. In practice 'methods' need to be left up to the managers themselves. To push solutions invites criticism, since managers are seeking a subjectively felt legitimacy as active decision makers. This was the real problem with Taylor's 'one-best-way'. He was a typical eccentric engineer with insufficient understanding of marketing. He fell out with his patrons for insisting on his own methods being implemented exactly, particularly the setting up of planning departments. Purveyors of more flexible 'user-friendly' versions of scientific management like Bedaux had more success in the market than the pioneer (Nettle 1990). Producers of management discourses can get it wrong just like producers of new innovations if they over-develop the technology.

Management discourses must be shaped by managements' own assumptions about itself. The consultant must be clear about these assumptions and how they affect the product. The value component in managerial discourses is ideological rather than methodological to the extent that control must be presupposed as a precondition for solving problems. Producers needs to focus chiefly on how they can construct a prosthetic lens that will allow problems (worker/organisation) to be seen as objects of control, and therefore as already essentially *under control*. What we call methods are in fact presentation techniques if they 'work'. They define pictorially a logical model of control. Methods construct the problem as an object so its behaviour can be manipulated by levers which the subject (managers) can control.

The division here between normative and technical discourses consists really in the form of this model, in the logical determinants used to map the object for the subject. Normative/rational discourses provide different software for running a game simulation. Normative discourses tend to run an apparatus in which the individual is determined by group norms by a 'logic' of 'sentiments' 'attitudes' 'values' etc. Attention is immediately shifted away from the now passive object to the sociopsychological model of forces which shapes behaviour. In Taylor's case behaviour is determined by physical/physiological forces. The model is more centred on the body than the mind, but the logic is the same. What was at stake for Taylor was never an empirically verifiable set of methods (Rabinbach 1990). His approach was not concerned with analysing the elements of skill from which a method was derived. It projected a presentation of labour as a passive dissected anatomy of elements and hence as an object for management as the empowered subject. The set-scenery of measurement: the instruments, procedures, detailed observations were as or more important than the data. After all, time measurement was difficult to implement because it was based on arbitrary measurements. There was little agreement on how work elements should be defined among Taylor's disciples. And his production planning system required an infrastructure that was expensive and impossible to sustain (Flynn 1998). Taylorism like other discourses produced 'flux' as it dissipated itself in infighting among rival formulations of the logical model. But it does not necessarily matter if the methods cannot be implemented. As Knights (1992) shows in relation to an organisation's use of Porter's strategy model, the role which the model had in representing the organisation and its environment for managerial subjectivity means that managers continued to employ the model even though the concepts could not be implemented.

The initial way in which the object is depicted as an object of management control, and how dramatically this presentation can be made appears to be the crucial sales pitch of any management discourse. This is how the use-value of the knowledge commodity must conform to the conditions of achieving value through exchange. Most of what can be accomplished may be achieved through the simple visual diagrammatic presentation of this state of affairs. But what we are suggesting is that in order to achieve value for managers it tends to be attenuated to the presentation of a logical image of control which cannot provide guidance concerning its implementation. What we are saying is that this cripples the product's use-value. It is part of the problem which we see in organisations as the increasingly cluttered graveyard of failed TLAs.

#### The Work-flow Model

If we return again to the subject of BPR we can see this problem depicted in workflow models. BPR as we have suggested is still well and truly alive in the form of BPI or BPM. And its basic techniques of workflow analysis are more popular than ever. While there are other process analysis methods, workflow models dominate the market, though there are some 200 rival workflow methodologies and little agreement as to how they can be standardised. (Basu & Kumar 2002). The core to work flow is the presentation of a process as a logical entity that is essentially under control. And the image has an expansive significance because in the field workflow is typically used as a 'synonym' for business process (Van der Aalst & Van Hee 2002, p. xvi). To present this image requires a method of presentation which its practitioners are quite clear and matter-of- fact about. As Bond (1999) relates, the chief concern of workflow analysis is not with the actual empirical contents of processes only their logic. So how can we see this esoteric logic? Simple. We assume a set of conditions. We assume a definite start and end simply so we can hermetically seal the process, within an artificially self-contained space that allows us to regard only the characteristics of the movement, the passing of messages.

In this way the crucial step in process analysis is basically accomplished diagrammatically through drawing a process in a way that isolates it from outside influence, turning it into an 'object'. This seems like a mere preliminary in order to do work, but in this act everything is already done. We have separated the 'internal' from the 'external' world. The objectification of the process makes all the conditions and context, disappear. This is what has been censored. Indeed such information is termed 'illegal' as a basis of process analysis (Leyman & Roller 2000). Once the boundary is drawn the environment becomes a superfluous backdrop. The show can start but it is already over.

Drawing arrows does not establish a relationship. The environment is outside, the process is inside the circle. And how is this line drawn? There cannot be an answer to this since everything that is possible from a process modelling follows from just doing it. This procedure also affects what is inside the process-object, since it requires that we also depict the product as an object, as essentially already there, already produced. Products, for example insurance claims, can only be depicted as already complete objects or 'tokens' so we can observe the effects of different kinds of channel pathways, sequences, branching and parallel processing on the movement of the objects. Hence our picture also determines what we can analyse which is how we can shorten and speed up a process (e.g. through parallel processing) under the presumption that this must have something to do with desirable strategic outcomes just as cost or service.



#### FIGURE 2 A Classic Petri Net

(from Van der Aalst and Van Hee 2002, p. 101)

Workflow depicts processes as discrete isolated pinball machines containing tokens so they can be viewed as capable of being quantitatively analysed not mechanically as in the case of Taylorism but hydraulically like data flows in information processing systems. But it is questionable how the products 'move' since the procedure is about constructing objects. Perception of flow actually depends on the elision of the activities in the process which then appear as 'transitions' of the object between 'places'. Work only consists in providing a kind of external resistance or friction to flows because it is not seen as being constitutive of objects, which of course are regarded as being already constituted.

This purely logical image, of hydraulic flows, is enormously powerful precisely because of the way the depiction of the process as an object evokes the subjective action of the manager as pinball player or hydraulic engineer. Above all, managing processes becomes *fun* especially when you do it on a computer because it involves opening channels, widening and connecting them, building dams and reservoirs. But this is the danger of our work-flow model if we think we have in our grasp a model of business processes. For to make the logical model we had to excise everything about the actual state or conditions of a work process as a condition of analysis. The model which is concealed from us in the software is based on highly counter-intuitive thinking which creates the 'objects' we can now appear to manipulate. In practice work flow models which dominate BPR methodology focus on aspects of processes which are actually fleeting and temporary in most processes even in 'continuous' ones (Harrison 1998). Flow charts like that above represent an idealised picture of a process as object of control. And while there is enormous appeal in such pictures because of their logic, the danger to paraphrase Wittgenstein is if we then "predicate of the thing what lies in a method of representing it" (2001, s. 104).

#### **Pictures of control**

The paradoxical aspect of the flow model as we can see is that control cannot be presented as a problem because it a *requirement*. Therefore the problem always escapes us. We always regard reality curiously from hindsight. But this is also part of the satisfaction we get from such models. The picture of the already controlled world is the image of rationality. It is the set of proper accounts for action with causes that line up neatly to effects; stimuli to responses. Learning to grasp things this way after the event but backdate it as reasons for action is a very important practice for managers. It is part and parcel of management practice that one learns the art of rendering accounts of one's actions, of explaining how one has acted as though it was according to a logical rule. Management discourse must help managers to regard their action this way, because the skill of self evaluation in which one objectifies oneself as a rational actor, is a critical if contradictory precondition of managerial self-actualisation (Foucault 1983; Knights & Morgan 1991). So it is not hard to sell a simple game of pinning causes on effects like SNA.

But for all that, the problem is whether in achieving this sense of control a management discourse can provide guidance concerning its application precisely to the extent it is concerned with rationalising action. The picture of reality as under control, addresses and reinforces managerial self-legitimization at the cost of its own usefulness outside of what is in fact a minority of preconditioned cases. Because our models tend to exclude problems of control they do not provide the heuristics we need to help us deal with the multitude of real situations where exceptions are the rule (Saastamoinen 1995). On this point it is interesting how workflow approaches predominate in certain industries (banking, finance and insurance), where the high

volume of standardised and above all discrete transaction based nature of the work, compensates for the models (WFMC 1998, p. 3).

Our TLAs always come with this fine print. First let's presuppose control then we'll show you how to operate a control system. MRP/ERP systems are a good example. An MRP system requires predetermined knowledge about customer demand, product details (bill of materials, inventory) and lead times to supply; all of which for the majority of business may be intrinsically problematic at least in part (Braglia & Petroni 1999; Kumar & Meade 2002). ERP systems which build on MRP have an even greater appetite for such information; the result being that businesses that want to use ERP often face a Procrustean alternative of simplifying their business processes to conform to the requirements of the system or engage in very costly and frequently unsuccessful attempts to customise such systems (Chen 2001; Koch 2001). As soon as one starts introducing problems about choices into processes, as soon as it cannot be reduced to a mere *transition* of input into output, and be treated merely as a transaction, or the sending of a message, the application of the logical model entailed in ERP breaks down. But even where it seems to work, can we know why it works, since as we can see in the work flow model above the conceptual lights always go out when something happens and only come on when the system is between transitions, when it is under control again. Curiously, this is similar to the problem we have in conceptualising consciousness. Since our questions about consciousness presuppose consciousness, the object of enquiry escapes us. It is like opening the fridge door to determine whether the light is always on. Our actions in orienting ourselves to the problem preclude the knowledge we seek. (Carter 2002, pp. 16,30).

Because our models of control presuppose control, they can only be depicted. First we must have 'grasped' the image before rationalisations become explanations. The meaning *consists* in this aspect of the presentation. For this reason the critical analysis of management discourse needs to focus much more on the use of models and methods which are often seen as mere diagrammatic tools of exposition. The onion-diagram which depicts the 'organisation' below has close resemblances to the flow diagram which depicts the process above. Again the key procedure is the drawing of the circle which creates the object. While it is supposed to situate the organisation in 'its' environment, it immediately objectifies the organisation as something separate and inner and the environment as outer. What is depicted in this diagram is a view of the organisation as part of the world but not a part, a view of society as a plethora of unbounded inchoate influences impacting on the organisation much like the earth in ancient cosmologies is surrounded by spheres of planets and stars. To grasp this image is to grasp a whole galaxy of political and social presuppositions.



An organization and its environment



#### **GETTING OFF THE SEE-SAW?**

As Burrell and Cooper (1988) suggest, considering how problems are set up as problems for management in management discourse is the crucial first step for a critical management theory. But what is that first step and how can we take it? It is proposed this should focus on the uncanny pervasiveness of dualities in our way of thinking about problems. The first step is to be conscious about the nature of the academic games we play on our dualistic conceptual see-saws. In management discourse this can be described in terms of the technical/normative, duality, and in different forms this duality resonates in all areas of academic management practice. Understanding the nature of this play-equipment, how it operates in accounting, marketing, IT and management disciplines is an important focus of a critical management discourse. A critical discourse should also be self-conscious about how existing 'critical' methods, including holistic or dualistic perspectives, tend to perpetuate the see-sawing motion from fad to fad.

Getting off the see-saw, we have suggested, begins with considering how the dualities that plague us and obsess are created by the very questions that continually frame our problems: questions like 'what is a process', what is knowledge', 'what is organisation?' The problem is not whether our approaches are too one-sided. Our search for generic knowledge is the problem. It causes the dualities which only organise our confusion about knowledge we may not possess except as an image, a fetish. While this need is underpinned by a dense web of academic and managerialist

interests in *possessing* knowledge as a means of control, it continually results in logical models which cannot be implemented, which continually presuppose what they purport to explain. This is the problem. The search for this generic foundational knowledge, cuts us off from the analysis of the commonplace forms of knowledge in real life, and the complex relationship between these different forms. Here we must reiterate Wittgenstein's injunction that 'what is hidden is of no interest to us'. The thinking which seems to transport us to higher metaphysical levels only serves to distract our attention from a 'perspicuous representation' of things. (Wittgenstein 2001, ss. 122-126; Pleasants 2003).

The dialectical approach we have roughly outlined is a therapy which seeks to treat the different logical, social, and psychological aspects of this problem which continually reproduces the see-saw of management fads. The result of this seesawing process, as world weary editors observe, is that we are not *progressing*. So long as management discourses continue to be characterised by technical and normative rationalities trying to establish a logical basis for the exercise of expert power, ambivalence will continually be fuelled as to whether management can ever transcend its reliance on traditional authority. For the aerial performance of expert authority to work, the dirty work of setting up the preconditions always has to be done. Control is a precondition not a result of any logical model of control. This is the paradox which is exposed to view before managers press the trap-door button on a fad. While the see-saw always receives renewed impetus, from the persistent attraction of the image of rationality, the alluring representation of a world under control, in the end it only exists inside the virtual reality helmet of our discourses. Outside, however, nothing changes, management prerogative still depends as it always has on the maintenance of authority which as Bourdieu (1976) pointed out must always invoke silence concerning its foundations. And if the cultural reserves of that authority cannot be found in the West, then in Japan or China or somewhere else where traditional authority can still be sustained for a while by custom, if necessary by violence.

The see-saw of fads is a side-show, a way of continually distracting and putting off the real problem of control which technical or normative models of control exclude. Management culture invests so much in avoiding this 'black hole' at its centre. But as Wittgenstein persistently demonstrates it's only a simple fact. We cannot explain how our rules, even the simplest ones, even counting numbers or responding to signs, are logically connected with our actions in following them (2001, s198, s201; 1998, ss. 35-38). We feel we *must* believe in the possibility of providing the magic link between an order and its execution. It has been the avowed purpose of management discourses to provide this key. But *is* there a dichotomy at all? 'The *order* –why that is nothing but sounds, ink marks' (2001, s. 431).

#### References

Abrahamson, E. 1996, 'Management fashion', *Academy of Management Review*, vol, 21, pp. 254-285.

Anklam, P. 2002, `Knowledge management: the collaboration thread', *Bulletin of the American Society for Science and Technology*, Aug/Sept, pp. 8-11.

Armstrong, P. 1984, 'Competition between the organizational professions and the evolution of management', in *Work, Employment and Unemployment*, ed W. Thompson, Open University Press.

Barley, S. & Kunda, G. 1992, 'Design and devotion: surges of rational and normative ideologies of control in managerial discourse', *Administrative Science Quarterly*, vol. 37, pp. 363-399.

Basu, A. & Kumar, A. 2002, `Research commentary: work flow management issues in e-business', *Information Systems Research*, vol. 13, no. 1, pp. 1-14.

Biazzo, S. 1998, `A critical examination of the business process re-engineering phenomenon', *International Journal of Operations and Production Management*, vol.18, nos. 9/10, pp. 1000-1016.

Biazzo, S. 2002, 'Process mapping techniques and organisational analysis: lessons from socio-technical systems theory', *Business Process Management Journal*, vol. 8, no. 1, pp. 42-52.

Birnbaum, R. 2000, `The life cycle of academic management fads', *Journal of Higher Education*, vol. 71, no. 1, pp. 1-16.

Bitici, U. & Muir, D. 1997, 'Business process definition: a bottom-up approach', *International Journal of Operations and Production Management*, vol. 17, no. 4, pp. 365-374.

Bollinger, A. & Smith, R. 2001, `Managing organizational knowledge as a strategic asset', *Journal of Knowledge Management*, vol. 5, no. 1, pp. 8-18.

Bond, T.C. 1999, 'Systems analysis and business process mapping: a symbiosis', *Business Process Management Journal*, vol. 5, no 2, pp. 164-174.

Boudreau, M-C, & Robey, D. 1996, 'Coping with contradictions in business process re-engineering', *Information, Technology and People*, vol. 9, no. 4, pp. 40-57.

Braglia, M. & Petroni, A. 1999, 'Shortcomings and benefits associated with the implementation of MRP packages', *Logistics Information Management*, vol. 12, no. 6, pp. 428-438

Brownline, R. 2001, `No more acronyms', *Design engineering*, vol. 5, pp. 1-4 Bourdieu, P. 1976, *Outline of a theory of practice*, Cambridge University Press. New York. Burrell, G. & Cooper, R. 1988, `Modernism, post-modernism and organisational analysis: an introduction', *Organisation Studies*, vol. 9, no. 1, pp. 91-103.

Carchedi, G. 1977, *On the economic identification of social classes*, R&KP, London. Carlopio, J. 1998, *Implementation: making workplace innovation and technical change happen*, Mc-Graw-Hill, Sydney.

Caudron, S. 2002, 'Just say no to training fads', *Workforce*, vol. 81, no. 5, pp. 20-2. Cao, G. Clarke, S. Lehaney, B. 2001, 'A Critique of BPR from a holistic perspective', *Business Process Management Journal*, vol. 7, no. 4, pp. 332-339. Carter, R. 2002, *Consciousness*, Weidenfeld & Nicholson, London. Chen, I. 2001, 'Planning for ERP systems: analysis and future trend', *Business Process Management Journal*, vol. 7, no. 5, pp. 374-386.

Connell, A. & Nord W. 1998, Reconsidering the fact-value antinomy: a comment on eastman and bailey', *Organization Science*, vol. 9, no. 2, pp. 245-250.

Davenport, T.H. & Short, J. 1990, 'The new industrial engineering: information technology and business process redesign'', *Sloan Management Review*, Summer, pp. 11-27.

Diakoulakis, I. Geogopoulos, N. Koulouriotis, D. & Emiris, D. 2004, `Towards a holistic knowledge management model", *Journal of Knowledge Management*, vol. 8, no. 1, pp. 32-46.

Fleischman, R. 2000, `Completing the triangle: taylorism and the paradigms', *Accounting, Auditing and Accountability Journal*, vol. 13, no. 5, pp. 597-624.

Flynn, J. 1998, 'Taylor to TQM', *IIE Solutions*, vol. 30, no. 10, pp. 14-28.

Foucault, M. 1983, 'The subject and power', *Critical Inquiry*, vol. 8, no. 4, pp. 777-795.

Gabriel, Y. 2002, 'On Paragrammataic uses of organization theory –a provocation', *Organisation Studies*, vol. 23, no. 1, pp. 133-142.

Giaglis, G.M. 2001, `A taxonomy of business process modelling and information systems modelling techniques', *International Journal of Flexible Manufacturing Systems*, vol. 13, no.2, pp. 209-28.

Goguen, J.A. & Burstall, R.M. 1992, `Institutions: abstract model theory for specification and programming', *Journal of the Association of Computing Machinery*, vol. 39, no. 1, pp. 95-146.

Gottdeiner, M. 1993, `Ideology, Foundationalism, Sociological Theory', *The Sociological Quarterly*, vol. 34, no. 4, pp. 653-671.

Grint, K., & Case, P. 1998, `The violent rhetoric of re-engineering: management consultancy on the offensive', *Journal of Management Studies*, vol. 5, no. 7, pp. 1-17. Grint, K. & Case P. 2000, `Now where were we?: BPR lotus-eaters and corporate amnesia', in *The re-engineering revolution: critical studies of corporate change*, eds D. Knights, & H. Wilmott, Sage, London.

Hammer, M. 1996, *Beyond Re-engineering*, Harper Collins Business, London. Hargadon, A. & Fanelli, A. 2002, `Action and possibility: reconciling dual perspectives of knowledge in organizations' *Organization Science*, vol. 13, no. 3, pp. 290-302.

Harrison, A. 1998, `Investigating business processes: does process simplification always work?' *Business Process Management Journal*, vol. 4, no. 2, pp. 137-153. Hilmer, F. & Donaldson, L. 1996, *Management redeemed: debunking the fads that undermine our corporations*, Simon and Schuster, New York.

Huczynski, A. 1993, *Management gurus: what makes them and how to become one*, Routledge, London.

Knights, D. 1992, 'Changing spaces: the disruptive impact of a new epistemological location for the study of management', *Academy of Management Review*, vol. 17, no. 3, pp. 514-536.

Knights, D. & McCabe, D. 2002, `A road less travelled: beyond managerialist, critical and processual approaches to total quality management', *Journal of* 

Organizational Change Management, vol. 15, no. 3, pp. 235-254.

Knights, D. & Morgan, G. 1991, 'Corporate strategy, organizations and subjectivity: a critique', *Organisation Studies*, vol. 12, no. 2, pp. 251-273.

Knights, D. & Willmott, H. 2000, `The Re-engineering revolution? An Introduction', in *The Re-engineering revolution: critical studies of corporate change*, eds D. Knights, & H. Willmott, Sage, London.

Koch, C. 2001, `Enterprise resource planning', *Journal of Organizational Change Management*, vol. 14, no. 1, pp. 64-78.

Kock, N. & McQueen, R. 1996, 'Product flow, breadth and complexity of business processes', *Business Process Re-engineering and Management Journal*, vol. 2, no. 2, pp. 8-22.

Kumar, S. & Meade D. 2002, 'Has MRP run its course? a review of contemporary developments in planning systems', *Industrial Management and Data Systems*, vol. 102, no. 8, pp. 453-462.

Layton, E. 1971, The Revolt of the Engineers, Ohio University Press, Ohio.

Leymann, F. & Roller, D. 2000, *Production workflow: concepts and techniques*, Prentice-Hall, Upper Saddle River NJ.

Littler, C. 1978, 'Understanding Taylorism', *British Journal of Sociology*, vol. 29, no. 2, pp. 185-203.

Marx, K. 1972, Capital Vol 1, Dent and Dutton, London.

Marx, K. 1973, *Grundrisse: foundations of the critique of political economy*, Vintage Books, New York.

Meiksins, P. 1984, 'Scientific management and class relations: a dissenting view', *Theory and Society*, vol. 13, pp. 177-207.

Mouzelis, N. 1975, *Organisation and bureaucracy: an analysis of modern theories*, R&KP, London.

Mukhi, S. Hampton D. Barnwell, N. 1988, *Australian Management*, McGraw-Hill, Sydney.

Murray, F. 1991, 'Technical rationality and the IS specialist: power, discourse and identity', *Critical Perspectives on Accounting*, vol. 2, pp. 59-81.

Nadworny, M.J. 1955, *Scientific Management and the Unions*, 1900-1932, Harvard University Press, Cambridge.

Nettle D. 1990, Management control in Australia: an historical perspective,

unpublished doctoral dissertation, Macquarie University, Sydney.

Nettle, D. 1995, 'The quality movement in Australia: past and problems', *Labour and Industry*, vol. 6, 3, pp. 27-49.

Nettle, D. 1996, The Karpin enquiry and management education in Australia, *Labour and Industry*, vol. 7, no. 2, pp. 103-121.

Offe, C. 1976, *Industry and Inequality: the achievement principle in work and social status*, Edward Arnold, London.

Pardo del Val, M. & Fuentes, C.M. 2003, 'Resistance to Change: a literature review and empirical study', *Management Decision*, vol. 41, no. 2, pp. 148-155.

Pascale, R. 1990, Managing on the Edge, Penguin, Harmondsworth.

Payne, W. 2002, `The time for ERP?' Work Study, vol. 51, no. 2, pp. 91-93.

Pink, D. 2001, `Q&A: Who has the Next Big Idea?' *Fast Company*, vol. 50, pp. 108-115.

Prichard, C. Hull R. Churner M. & Willmott, H. (Eds), 2000, *Managing knowledge: critical investigations of work and learning*, St Martins Press, New York.

Priem. R. & Butler, J. 2001, `Is the resource based view a useful perspective for strategic management research?', *Academy of Management Review*, vol. 26, no. 1, pp. 22-40.

Pleasants, N. 2003, 'Winch and wittgenstein on understanding ourselves critically: descriptive not metaphysical', *Inquiry*, vol. 43, pp. 289-318.

Rabinach, A. 1990, *The Human Motor: Energy, Fatigue, and the Origins of Modernity*, Basic Books, New York.

Ritzer, G. 1999, *Enchanting a Disenchanted World*, Pine Forge Press, Thousand Oaks CA.

Raub, S. & Ruling, C-G. 2001, `The knowledge management tussle- speech communities and rhetorical strategies in the development of knowledge management', *Journal of Information Technology*, vol.16, pp. 113-130.

Saastamoinen, H. 1995, 'Case Study on Exceptions', *Information Technology and People*, vol. 8, no. 4, pp. 48-78.

Shenhav, Y. 1999, *Manufacturing rationality: the engineering foundation of the managerial revolution*, Oxford University Press, Oxford.

Siragher, N. 1999, 'Enterprise resource planning: the end of the line for the sales automation market and a major step towards sales process definition standards', *Supply Chain Management*, vol. 4, no. 1, pp. 11-13.

Skinner, W. 1992, 'Missing the links in manufacturing strategy', in *Manufacturing strategy –process and content*, ed C. Voss, Chapman & Hall, London.

Slack, N. Chambers, S. Johnston, R. 2003, *Operations Management*, (4<sup>th</sup> ed.), Pearson, Harlow.

Valentine, R. & Knights, D. 1998, `TQM and BPR – can you spot the difference?' *Personnel Review*, vol. 27, no. 1, pp. 78-85.

Van de Aalst, P. & van Hee, K. 2002, *Workflow management: models, methods and systems*, MIT, Cambridge Mass.

Waddell, D. & Sohal, A. 1998, 'Resistance: a constructive tool for change management', *Management Decision*, vol. 36, no. 8, pp. 543-8.

Waring, S. 1991, *Taylorism transformed: scientific management theory since 1945*, North Carolina University Press, Chapel Hill.

Wensley, A. 2002, 'On the problems of management knowledge', *Knowledge and Process Management*, vol. 9, no. 2, p. 55.

Willmott, H. 1994, 'Business process re-engineering and human resource management', *Personnel Review*, vol. 23, no. 3, pp. 34-46.

Wittgenstein, L. 2001, Philosophical Investigations, Blackwell, Oxford..

Wittgenstein, L. 1998, *Remarks on the Foundations of Mathematics*, Blackwell, Oxford.

Workflow Management Coalition, 1998, *The Workflow Reference Model*, WFMC, Winchester.