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Thinking differently about the foundations  
and future of management studies**

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## **Foucault against management: Thinking differently about the foundations and future of management studies**

### **ABSTRACT**

Management studies must seek a greater association with its history. But only by also thinking critically about the historical assumptions that already pervade our field, might we increase the possibility of thinking differently for the future and get full benefit from this association. Counter-historian Michel Foucault never analyzed management directly, but his approaches can be effectively utilized to interrogate the historical assumptions upon which management studies is based, how these roots may limit us in the present and how we might think otherwise. This paper offers a synopsis of Foucault's ideas and how they might be applied, and two illustrations of their utility: the first examines the invention of management; the second deconstructs management's assumed disciplinary foundations.

## **Foucault against management: Thinking differently about the foundations and future of management studies**

Management studies appears largely ahistorical. There is a production line of management publications promoting universal techniques, apparently independent of time or context, and a wide stream of management writing defining 'cutting edge' techniques, which, on closer inspection seem largely similar to what has gone before (Barley & Kunda, 1992; Tsoukas & Cummings, 1997; Cummings, 2002). Furthermore, students of management only encounter the history of their subject briefly and uncritically: in an introductory class or perhaps a small appendix in a large textbook. Contrast this with the attention paid to history by students of other professional disciplines like architecture or medicine or law. However, there is a small but widespread set of shared assumptions about, for example, better management being a universal concern, when the pioneering age of management was, who the pioneers were and the field evolving steadily since that point (Barley & Kunda, 1992). These assumptions are largely based on histories that were written in middle decades of the 20<sup>th</sup> century as management studies was trying to establish itself as a serious or worthy discipline (Mooney, 1949; Urwick & Brech, 1951; 1953; Bendix, 1956; Dale, 1960; Merrill, 1960; Gross, 1964; Brech, 1965; Light, 1966; George, 1968; Child, 1969; Wren, 1972; Pollard, 1974). These histories were summarised and replicated into edition after edition of introductory textbooks in the years that followed (e.g., Koontz et al., 1980; Robbins, 1984; 1991; 1996; Du Brin, 1984; Dessler, 1986; Robbins & Coulter, 2002; Greenberg & Baron, 2003).

This paper will argue that while there should be a more systematic connection between management studies and history, we must not stop at knowing more about what we regard as our past. We must also question why our forebears developed the particular history that we base our assumptions upon and the politics of its construction. This is not simply an academic or archival exercise. To not take this second step may only lead to reifying, canonizing and thus reinforcing conventions; a historical awareness that constrains more than it liberates (Czarniawska, 2003). Only by unravelling the authority of our history might we increase our freedom to develop management studies beyond conventional historical boundaries.

We shall suggest that one of the best means of doing this is through a greater appreciation of the approaches of 'counter-historian' Michel Foucault. That Foucault is not already widely known and used in management studies is not because of any lack of potential applicability. Foucault's counter-historical approaches have been broadly applied to powerful effect in fields such as criminology, economics and psychology, at times when they were quite similar to our field now (e.g., Cohen, 1985; Lowry, 1987; Smith 1988; Richards, 1996). They were well established, but not so old as to be completely set in their ways. They had also never fully resolved whether they should be sciences, pseudo-sciences or something different. And they – or their students – paid little attention to the history of their fields. Foucault's under-use in management is due to the lack of accessible and broad-ranging introductory material that highlights the possibilities.

In addressing this lack, this paper goes beyond earlier attempts to introduce Foucault's work to management scholars. These have generally sacrificed broader appeal in search of authenticity of detail, and have focused either on particular periods of Foucault's work (McKinlay & Starkey, 1998; Starkey & Hatchuel, 2002); or discussions or critiques about the use of Foucault (Burrell, 1988; Barratt, 2002, 2003; Knights, 2002); sought to unravel a particular target by using one of Foucault's particular approaches (Hoskins & Macve, 1986; Knights, 1992; Townley, 1993; Hoskin, 1994; Fox, 2000); or applied some aspects of Foucault's thinking to a particular dimension in a sample of companies (Covaleski, et al., 1998). This is likely the first paper that attempts to use Foucault's historical oeuvre against the foundations of management studies as a whole.

## **FOUCAULT: COMMON THREADS AND DIFFERENT APPROACHES**

Michel Foucault (1985: 9) wrote 'counter-histories'. He wanted to counter conventional or Hegelian histories: those that sought to uncover the truth of events, and present them as a progressive chain that leads to (or causes) a 'higher-level' present. This type of history legitimates the establishment, glossing over that not recognized as contributing to current achievements. "Instead of legitimating what is already known", Foucault (1985: 9) aimed to show that the past, and thus the present, could be understood in other ways, thereby freeing "thought from what it silently thinks, and so enabl[ing] it to think differently".

Foucault spent decades developing different ways toward this aim. Hence it is difficult to define a single 'Foucauldian approach' (Burrell 1988; Flynn 1994). Following pages will outline four Foucauldian methods. But it will be helpful to first understand more about how Foucault is not a regular historian. Despite different approaches, six non-conventional threads weave through Foucault's work. We shall discuss these presently.

Later sections of this paper, counter-histories of management studies' foundations, will use these six threads and four approaches to firstly take aim at the historical assumption that management has always existed and that our knowledge of it has advanced over time as we have studied it more systematically or scientifically. Management, as we tend to understand it, could only have emerged in the first half of the 20<sup>th</sup> century, as 'increasing efficiency' became the problem *du jour*. Secondly, it will highlight how the 'normal' management curriculum is based on particular shapes of seeing that formed as a lack of standardization came to be 'the problem' and the institution of the business school converged with changes in economics. Rather than the development of this curriculum being a smooth arc of refinement, just 80 years previous a very different curriculum was being set up.

### **Six common threads**

**History must be written from a particular viewpoint.** Foucault believed in an infinite number of perspectives one could take on an object and thought it impossible to get over and above these to write from a "supra-historical viewpoint" (Foucault, 1977b: 159; Flynn, 1994: 38). Consequently, he did not aim for the

‘whole truth’, just enough to raise doubts about what was promoted as the truth of the evolution of an object. While “historians take unusual pains to erase the elements in their work which reveal their grounding in a particular time and place”, Foucault’s (1977b: 90) history would be “explicit in... acknowledg[ing] its system of injustice. Its perception is [knowingly] slanted”.

**Problems not periods.** Foucault (1985: 10) did not seek to explain whole periods against a criterion of linear progress, but to “define the conditions in which human beings ‘problematize’ what they are, what they do, and the world in which they live”. He started with present concerns or particular problems and asked: ‘why do we treat madness as we do?’ ‘why are we building more prisons?’; and then questioned normal responses: ‘because our methods are the best suited to normalise madness’, ‘because they are the best form for discouraging criminals’.

Thus, Foucault moved **from linear time as a model for history to space**. He drew upon spatial and visual metaphors like Bentham’s model prison the Panopticon to depict the ‘architecture’ through which people in a particular society saw the world (Foucault, 1977). These frames of looking would, Foucault argued, determine and shape the problems and objects seen. Foucault often began his histories by juxtaposing different artefacts to depict these different ‘shapes’. In his book *The Order of Things* (1970: xv), a Chinese encyclopaedia’s categories set against modern Western sensibilities illustrate “the exotic charm of another system of thought [which is at once] the limitation of our own, the stark impossibility of thinking *that*”. The artefacts revealing the predispositions of an age that Foucault used as ‘evidence’ did not need to be grand, canonical or obvious, they could just as easily be ‘lo-brow’ or mundane or lying obscured in dusty archives (Foucault, 1980: 194). In *Discipline and Punish*, for example, Foucault (1977) highlighted the difference between Western ways of thinking in the 18<sup>th</sup> and 19<sup>th</sup> centuries by contrasting a grandiose description of the public execution of the regicide Damiens with a little known prison timetable.

**Historical nominalism.** Against histories that traced the development of objects and the separate subjects that examine them, Foucault saw subject and object as co-determining one another. He would argue, for example, that ‘Man’ did not exist until the practices constituted by the rise of humanism and the *human sciences* took hold (Foucault, 1970); and that ‘Madness’ could not be conceived without the conditions that enabled *psychology*. It was the emergence of humanism in combination with the transition into modernity, which sought to move beyond customs and traditions like the power of the sovereign or his agents to ‘do violence’ in order to maintain control of society, that made a problem of how control was to be upheld. This problem created the necessity for human sciences to come forth and objectively state norms that should be adhered to. Infringement of these norms would justify punishment, internment or correction without any recourse to the inequalities and superstitions that were seen to pervade earlier modes of authority.

**Multiple lines of influence.** Rather than plotting the past in terms of its linear path to the present, Foucault focused on how things are constituted by a ‘diagram’ or web of relations that spreads out from a particular problem to sustain understanding. Crucially, this web would incorporate a history that would connect it to other elements considered important and worthy and show how the object or subject in

question constituted a further advance. Noujain (1987) demonstrates this dispersive outlook by illustrating Foucault's key dimensions in the formation of psychoanalysis (Figure 1). The subject emerges as part of modernity's quest for bands of normality, which sustains itself by latching onto the already accepted scientific institutions of the modern hospital and the science of psychology. The history of psychoanalysis spoke of these links, but remained silent on how it built upon other non-scientific elements that promoted its possibility: the confessional, a particular inheritance of Christianity, and the presence of the organisational form of asylums formerly used for interning leprosy victims.

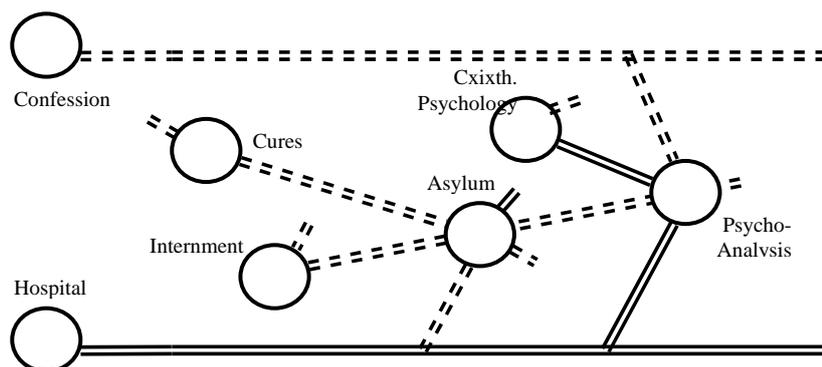


FIGURE 1  
The 'scientific' (solid lines) and 'un-scientific' (dashed lines) foundations of psychoanalysis (adapted from Noujain, 1987)

**Overturing continuities and discontinuities.** Finally, whereas historians tend to depict how some things cease (e.g., archaic methods of knowing Man) while others continue (e.g., the object Man), Foucault countered conventional continuities and discontinuities. He demonstrated, for example, that Man was a discontinuous, or recent, conception; while the new human sciences that would 'know Man more truly' actually continued with many archaic traditions.

#### Four different approaches

While the themes outlined above remained fairly constant throughout Foucault's work, he developed quite different means of achieving his aims, each responding to the problems surfaced by previous attempts (Burrell 1988; Flynn 1994). The next few paragraphs will outline his four main approaches.

**The early works: progressive histories may conceal the truth.** Foucault's first works (1965; 1975; 1976b) critiqued psychology and psychiatry's status as sciences and their assumption that 'normal' (or 'abnormal') sanity is an objective, pre-existing condition. Foucault's (1976b: 73) counter-histories showed that "Man became a 'psychological species' only when his relationship to madness made a psychology possible"; when the Age of Reason made madness a problem to be resolved and, hence, an object of inquiry. 'Madness', as such, was not always

present, waiting to be discovered by a rigorous enough science; it was brought into being by the very practices that made such a science possible. Foucault (1965: 142) highlighted the role played by psychology's history in this deceit: it presented psychology as arriving in "that happy age in which madness was at last [properly] recognized and treated in accordance with a truth to which we had long remained blind".

Because this history is written as anticipation (the past viewed in terms of present 'heights') a widely accepted but paradoxical set of ideas takes hold. The idea that madness was not recognised until it was rigorously grasped by modern science (here historians retrospectively find the origin of psychology) and then the idea that the pre-modern approach to madness was either simplistic or erroneous, despite the fact that psychology's history has said that such an object *had not been recognised yet*. This, says Foucault, is no foundation for a science.

Moreover, Foucault (1965; 1976b) argued psychology's attempt to found itself as a science had not overcome a mis-recognition. It had, in fact, promoted a mis-recognition of a primordial understanding. Prior to modernity, during the Renaissance for example, our understanding was richer, more humane and more truthful. Modernity's 'discovery' of 'madness' actually concealed real madness.

But Foucault's idea that madness has a true essence that modern psychology is masking was problematic. For how could Foucault know that an earlier experience was more real or essential (Derrida, 1978; MacIntyre, 1991)?

**Archaeology: every strata promotes its own particular truths.** Rather than addressing the history of one human science, Foucault's archaeological period sought "to determine the basis or archaeological system common to a whole series of scientific 'representations'" (Foucault, 1970: xi-xii). He still critiqued the 'scientificity' of human sciences, but his focus was no longer 'how might a particular science not be a science and keeping us from the truth?', but 'what was it that *motivated* the human sciences to present themselves as sciences, to create histories that promoted this, and the consequences of this will-to-science?'

Archaeology's most important concept is the *episteme*. Recognising the problem in promoting a pre-modern view of madness as superior, Foucault now presented the view that all truths, all conceptions of objects, are bound by the *epistemic* 'strata' within which they are situated. He defines an episteme as: "something like a world-view, a slice of history common to all branches of knowledge, which imposes on each one the same norms and postulates, a general stage of reason, a certain structure of thought that the men of a particular period cannot escape" (Foucault, 1976a: 191). And he defined 'archaeology' as: "a history which is not that of [knowledge's] growing perfection, but rather that of its conditions of possibility" (1970: xxii). By showing the singular conditions and specific statements that different episteme would promote, he sought to critique the current arrangements that we might assume to be natural or superior. In the modern episteme, for example, human studies must satisfy the conditions of the so-called 'normal' sciences to be 'valid'. Foucault (1970) claimed this to be a terrible misfit, arguing that we must recognise the 'specific' configuration of all fields.

But archaeology also has its problems. It reinforces the worth of the ‘normal sciences’ by assuming that they had achieved methods suitable to their objects. In addition, Foucault unwittingly indicated that access to an objective understanding of objects was possible. How else could his ‘specificity’ thesis work? Also, the specificity thesis led to a point where infinite orders of knowledge could be justified on the grounds of the specificity of particular objects. If this was so, how then can one offer any sort of critique? And a deeper conundrum: Foucault implies that an episteme is a structure from which all thinkers of a particular period cannot escape (e.g., Foucault, 1970: 17-19, 1976a: 72-4, 146-7). The archaeologist can then say nothing outside of this structure. Foucault’s rigid conception of episteme denuded his ability to offer any critical analysis of consequence.

**Genealogy – the truth is shaped and maintained by the “family network”.** In hindsight, Foucault (1980: 105) claimed that “what was missing from my work was the problem of ‘discursive regime’, the effects of power proper on the enunciative play. I confused it too much with systematicity... or something like a paradigm”. To help him change tack he drew on Nietzsche’s view that there are no objective essential forms that can be appealed to: only chaotic webs of change and chance relations. In being afraid of this non-foundational uncertainty, people look to historians to show that the present actually rests upon grand origins, profound intentions and immutable necessities. In Foucault’s words (1977b: 144), such “origin[s become] the site of truth” and, in a circular manner, make “possible a field of knowledge.” But “in placing present needs at the origin, the metaphysician would convince us of an obscure purpose that seeks its realization at the moment it arises”; this “truth” then becomes “the sort of error that cannot be refuted because it [has been] hardened into an unalterable form in the long baking process of history”. It becomes, in other words, perfectly natural.

Hence, in genealogy Foucault moves away from archaeology’s structuralist tendencies. All knowledge is historical as before, but all history, and consequently the development of humanity, can now only be “a series of interpretations” not related to the nature of things but to particular interests (Foucault, 1977b: 151).

The question then became ‘if there is nothing positive that knowledge can attach itself to, what sustains our belief in the interpretations that we take as knowledge?’ Like Nietzsche, Foucault’s answer was power. Archaeology examined the knowledge promoted by various strata or episteme. Genealogy would focus upon the relationship that Foucault (1977a: 27-28) called “power/knowledge”. While he (1980: 52; 194) saw power as positive, or “perpetually creating knowledge” by producing realities, “domains of objects and rituals”; Foucault also found that “conversely, knowledge constantly induces effects of power”: “It ‘excludes’, it ‘represses’, it ‘censors’, it ‘abstracts’, it ‘masks’, it ‘conceals’”. As Deleuze (1988: 29) described it, “Power ‘produces reality’ before it represses”.

Playing an integral part in this producing-repressing relationship is the progressive history that a subject constructs out of a multiplicity of potentially contributing elements. This historical aspect *produces* by shaping the view and boundaries of the subject, thus making knowledge possible. However, it at once begins to shape a network that *represses* other interpretations. It may not be consciously developed, but this network grows and hardens as key texts educate initiates by reduplicating

events and origins and assumptions taken to be important.

While conventional history thus aims at forming singular events into ideal continuities, genealogy: “transposes the relationship ordinarily established between the eruption of an event and necessary continuity... records the singularity of events outside of any monotonous finality [and] disturbs what was previously considered immobile” (Foucault, 1977b: 154; Dreyfus & Rabinow, 1983: 120). Genealogy demonstrated how a field’s foundations are actually fabricated in a piecemeal fashion but then solidify to produce knowledge and marginalise other possibilities.

A good example is Foucault inquiry into sexual beliefs. By the late 20<sup>th</sup> century it was assumed Western society had finally begun to approach sexuality in an appropriate or proper manner. After the barbarity of pre-modern times and the Victorian Age’s humorously prudish shunning of sex, the matter-of-fact application of scientific methods to sex and sexuality was enabling moderns to chalk up another emancipating advance. Foucault (1978) countered that this ‘advance’ was not linked to a moral improvement, or reflective of a better understanding of the object ‘sex’, but to the development and effects of a singular problem and a specific configuration of power/knowledge.

Foucault showed the Victorians as actually having an unusually fervent interest in sex, and how an individual’s ‘sexuality’ became subject to intense scrutiny in their era, a further human object for scientific surveillance, codification and normalisation. Foucault (1978: 24) argued that sex here came to be: “inserted into systems of utility, regulated for the greater good of all, made to function according to an optimum. Sex was not something one simply judged; it was a thing one administered...; it had to be taken charge of.” Then, rather than the 20<sup>th</sup> century being a liberating break from the Victorian age, Foucault (1978: 34) showed it to be a continuation of their “regulated and polymorphous incitement to discourse” about sex and he examined how sexuality increasingly become subject to scrutiny, normalisation and surveillance (e.g., through classifying an individual’s sexuality in terms of particular determining ‘types’). All the discourse that emanated from new fields from population ecology to Freudian psychology, focussed on the ‘problem’ of sexuality, and this, in combination with the general chatter of that age, had, Foucault argued, led to societies that are more rather than less repressed sexually. And the intensity of this new network or family of sexual discourse made it hard to see beyond this repression or how things might be different or otherwise.

**Interpretive analytics: strata and networks shape truths that we must think beyond.** Whereas archaeology was denuded by the all-embracing nature of the episteme, genealogy’s argument left no space outside of power. While archaeology could no longer think an inauthentic order, genealogy turned every order, even the genealogist’s, into an inauthentic order, a facade sustained by power and necessarily marginalising alternatives. Taylor (1986: 93), and others (Habermas, 1986; Honneth, 1991; Brenner, 1994), consequently argued that Foucault relinquished any critical power by claiming there is “no order of human life... or human nature, that one can appeal to in order to judge or evaluate between ways of life”.

In an attempt to get around this problem, Foucault would undertake one last methodological reformulation. It was termed “interpretive analytics” and emerged

as he took the archaeological step back from genealogy necessary to enable him to be both analytical and critical. While genealogy looked at the role of power in the *formation* and maintenance of knowledge, archaeology enabled the provision of a system within which the *forms*, or statements of this formation, could be marked out and analysed (Dreyfus & Rabinow, 1983: 104ff.).

While *The History of Sexuality* began with particular unquestioned assumptions (e.g., sexual norms) and the power/knowledge that sustained them, interpretative analytics acknowledges that underlying this must be an archaeological belief that things have been different and could be different again. “Having begun on the inside” as a genealogist, the interpretive analyst must then recognise that to interpret, analyse and be critical requires an archaeological isolation of the present strata of networks relative to alternatives (Dreyfus & Rabinow 1983: 106).

To this end, Foucault introduced the *dispositif*. While this is similar to a series of episteme, the *dispositif* is not a positively existing structure that causes all discourse. It is only a normative construct depicting different socio-cultural trends toward a particular object. The interpretive analyst creates an apparatus to isolate a specific historical problem, but because this *dispositif* will be necessarily connected to the practice in question it cannot be a universal grid for analysing all things.

Foucault subsequently began to construct a *dispositif* of alternative views of sexual subjectivity starting with the Ancient Greeks in order to re-start his counter-history of sexuality. This would offer a range of ‘outside’ sets of power/knowledge relations that would show how things had been otherwise and thus could be otherwise again. Such an apparatus would aid in getting free of the present historical conventions and “enable thinking differently” (Foucault, 1985: 8).

<i>Common Themes</i>	<i>Different Approaches</i>			
	A. Early Works	B. Archeology	C. Genealogy	D. Int. Analytics
1. Explicit bias/aim	The aim is to reveal ‘truths’ that may lie buried underneath	The aim is to see how what have come, over time, to be believed as ‘truths’ are	There are no essential ‘truths’. The aim is to see that we take to be true is only that	The aim is to create particular apparatus that show what different
2. Problems not periods	misguided historical beliefs that have developed as	actually what the prevailing episteme (or	which has been developed by a network of	networks and episteme see as the ‘truth’, then to
3. Spatialization	subjects have sought to appear more scientific.	paradigm) steers us to look for and to subsequently see.	power relations that has grown to maintain and develop itself.	compare/contrast to enable thinking differently about a problem.
4. Subject/object co-creation				
5. Multiple lines of explanation				
6. Overturning continuity/discont.				

TABLE 1  
A summary of common Foucauldian themes and different approaches

Table 1 summarises Foucault’s common threads and different approaches. We shall utilize the common threads to interrogate historical assumptions about management studies in two illustrations. In each instance we shall be openly biased against

existing conventional historical assumptions. We shall look not at how management and the management curriculum evolved over time, but rather at the problems that brought ‘management’ into view; contrast different ways of seeing the same object by juxtaposing statements from different spaces; examine how the subject of management and what it studies are inextricably intertwined, enabling one another; and, we shall note many interwoven lines of explanation for this formation. Some of these lines create interesting unheralded or unwanted continuities and some misread discontinuities. We shall also draw upon some key ideas from Foucault’s different methodological approaches and at the end of each illustration utilize these to mark out ways in which counter-historical research in management might be furthered.

### **THE EMERGENCE OF EFFICIENCY AS THE PROBLEM CREATES THE SUBJECT OF MANAGEMENT**

“For the efficiency of an army consists partly in the order and partly in the general; but chiefly in the latter, because he does not depend upon the order, but the order depends upon him.”

Aristotle *Metaphysics* (XII, 1075a). Taken from the inside front cover of Chester Barnard’s *Functions of the Executive* (1938), Harvard University Press.

“We must consider also in which of the two ways the nature of the universe contains the good or the highest good, whether as something separate and by itself, or as the order of the parts. Probably in both ways, as an army does. For the good is found in the order and the leader, and more in the later; for he does not depend on the order but it depends on him.”

Aristotle *Metaphysics* (XII, 1075a). Translation by Ross and Smith (1908), Oxford University Press.

Above are two versions of the same passage of Aristotle’s *Metaphysics*. The second is a translation from 1908. It is similar to other well regarded translations before and since (Apostle, 1966, Politis, 2004). On top is a version reproduced at the start of *Functions of the Executive* by Chester Barnard, seen, alongside F.W. Taylor’s *Scientific Management*, as “the most influential book in the entire field of management” (Koontz et al., 1980: 51; Clutterbuck & Crainer, 1990: 15).

When those early managers, management thinkers or those just sympathetic to, or curious about, the fledgling field read Barnard’s landmark book, they would have been interested, legitimated, and perhaps even inspired to find themselves building upon, or guided by, the great philosopher’s words. But, this counter-history will argue that it is management, or the episteme that gave rise to management, which actually shapes Aristotle words here. Aristotle could not have been understood in

this way anywhere other than in the first decades of the 20<sup>th</sup> century.

Although it is not cited, the translation Barnard uses is Hugh Tredennick's, developed in the late 1920s and published in 1930 by Barnard's publisher: Harvard University Press. Barnard's quotation begins part way into Aristotle's passage, turning 'For the efficiency...' into the beginning of a sentence which it is neither in Tredennick nor in the original Greek. Thus, we do not get the sense that Aristotle was using the relationship between a general and an army as an analogy to describe how a supreme being combines with material elements to create order from chaos.

Apart from this, the most striking difference between the two passages is the insertion of "efficiency" in the first. Efficiency is not reproduced in any other significant translation, before or since. Indeed, the Greeks did not have a word to equate with efficiency as we read it now. So, why does Aristotle come to begin management's most influential book in this way? And how does the good, the greatest good, or the ultimate cause of form, come to be efficiency? Or, at least, why did this seem enough to prevent anybody questioning this notion? Barnard altered grammar toward achieving the emphasis that best suited his book, but he did not translate "efficiency" from the Greek. Why did Tredennick?

Tredennick may have transposed a meaning of efficiency much earlier than our own. For Aristotle is, in a sense, writing of 'the efficient cause' of things in the manner that Newton claimed concern in his physics only for what he called 'efficient causes' – those things that God's design caused (Clark, 1992). From the Latin *efficiens*, efficient, in the 17<sup>th</sup> and 18<sup>th</sup> centuries, was taken to be 'the cause that makes effects to be what they are'.

Perhaps efficient has been placed in this way, but this was not the common view of the word by the 1920s. This springs from a sense channeled in the last decades of the 19<sup>th</sup> century. As the laws of thermodynamics were applied to the technology of the steam engine, 'efficiency' became a measure of a machine's worth: 'the ratio of useful work performed to the total energy expended or heat taken in'. In the Oxford English Dictionary, the first application of this meaning as an analogy for human behavior is attributed to Alfred Marshall in 1916. However, it was used a few years earlier by manufacturing theorists with engineering backgrounds, like F.W. Taylor, as a general measure of an organization's worth.

The development of efficiency in the episteme that gave value to work of management engineers like Taylor, Fayol and others, changed the term in such a way that "efficient and good came closer to meaning the same thing in these years than in any other period" (Haber, 1964: ix-x). Efficiency had for some time been used as a personal attribute: to describe one who was effective, who got things done. But by the end of the 19<sup>th</sup> century 'mechanical efficiency' intermingled with previous meanings so as to indicate getting something done with minimum effort.

Through its association with machines, efficiency now possessed an air of benign and unquestionable objectivity, a sense of 'goodness' not based on particular interests or beliefs. It not only meant a movement or an order, but an objectively good movement or order. While Tredennick has left no note of explanation, we might surmise that the emergence of this efficiency: a term meaning 'to cause and

order' and 'to cause and order well' allows him to more effectively, in his mind, translate what Aristotle meant.

But what particular multiplicity of forces combined to give efficiency this status at the start of the 20<sup>th</sup> century? They are many and varied: political and legal expedients, the rise of engineering as a profession, a belief in the spread of scientific methods and sensibilities, clever marketing, secularization, and the unique phenomenon of the 'melting pot' (a term developed by Israel Zangwill in 1908) would combine to give rise to the articulation and fervent interest in a new problem: efficiency; and a new subject that would take efficiency as its object: management.

The opening line of F.W. Taylor's *The Principles of Scientific Management* (1911) reads "President Roosevelt, in his address to the Governors at the White House, prophetically remarked that 'The conservation of our national resources is only preliminary to the larger question of national efficiency'". This now seems an unusual thing for a President to say. So why did he say it?

Theodore Roosevelt was the Progressive Movement's most successful politician during America's 'Progressive Era' (1890-1920). The United States had grown wildly on the back of a laissez-faire economic outlook and the assumption that its natural resources were inexhaustible (Ekirch, 1974). The Progressives emerged as a political force in response to the problems attributed to the *ad hoc* exploitation of resources that flowed from this attitude (Hofstadter, 1963).

Roosevelt's platform for the 1901 Presidential Election was the 'progressive reform' of government practices and 'national conservation'. The momentum granted by his winning the election helped him to move quickly on his Reclamation Act, which was passed in 1902 so as to centralize the development of new lands. However, his conservation program soon ran aground as business interests and politicians from the developing Western states began to organize against it.

But culture was an even bigger obstacle. American's had assimilated the ideas of individuality, the freedom to stake one's own claims and develop things as one saw fit and as his savvy allowed. Disavowal of these left one's patriotism open to question. As Haber (1964: xii) observes, these ideas "could not with ease be attacked frontally, they could [only] be outflanked". The emerging term 'efficiency' provided the best possible means for Roosevelt to make such a maneuver.

Roosevelt focused attention on what he now termed the 'other side' of conservation, pitching, in a speech in August 1910, that "conservation means development as much as it does protection" and that the best development should obviously be that which develops "the most out of the least". Roosevelt's advisor Gifford Pinchot (in Ekirch, 1974: 150), thus described how both "government and business [came] to accept conservation in terms of simple efficiency". Conservation as "national efficiency" subsequently "provide[d] a popular [and patriotic] scientific answer to the new national problems of the twentieth century" (Ekirch, 1974: 150).

By the time of his 7<sup>th</sup> Annual Message to Congress, Roosevelt was happy to state that the conservation of national resources was preliminary to the larger question of national efficiency (the line that begins *The Principles of Scientific Management*).

By 1908, Progressivism, a manifesto that had been difficult to define, had come to mean “efficiency plus a commitment to collective betterment through the application of the latest advances in science” and leaders in all fields became afraid to be thought “un-progressive” (Ekirch, 1974; Calvert, 1972).

Reinvigorated, Roosevelt announced that a National Conservation Congress would take place in December 1908. For ‘expert guidance’ at the congress they turned to the professions; particularly mechanical engineers.

Engineers would not have been so prominent had the Congress had been held 30 years earlier. Elevated by the development of centralizing associations, more professional sources of recruitment, and being considered more ‘scientific’, mechanical engineering had in two just decades been converted from a trade to a prestigious ‘profession’ (Calvert, 1972). The Association of Mechanical Engineers (ASME), seeing the further prestige benefits that would accrue through association with Roosevelt and his emphasis on what many saw as engineering’s *raison detre*, was quick to agree to throw its weight behind his program (Haber, 1964).

One engineer enthused by his profession’s developing significance and influence was F.W. Taylor. Taylor’s greatest engineering achievement had been the development of tools that permitted greater precision in the cutting of steel and hence the possibility of turning out interchangeable parts (Clough, 1953). He held related ideas as to how men might be organized. In 1895 he presented his first paper at an ASME conference. It contained the gist of what would become *The Principles...* but was far more overtly moralistic (“if a man won’t do what is right”, Taylor said, “make him” – in Copely, 1923: 183). Taylor published a book called *Shop Management* in 1903 that achieved a loyal but limited following. In 1910 the ASME shelved a paper by Taylor on the grounds that there was nothing new or interesting in it. As Haber (1964: ix-x) concludes, “the checkered career of the Taylor system might have been completely disheartening to the Taylorites had it not been for the fullness of response that scientific management found among [Progressive] reformers and their public”. A clever lawyer named Louis Brandeis and The Eastern Rate Case of 1910-11 would help stir up this ‘fullness’.

The Eastern Rate Case stemmed from action brought before the Interstate Commerce Commission against the railroad companies’ proposed increase in freight rates in the Northeastern states. In early hearings counsel emphasized the hardship this would bring to farmers and other shippers. This did not capture public interest (although persistent price rises were a big issue in the US at this time, the general consensus was that farmers had never had it so good); and it was unsuccessful. Brandeis, who came to represent Eastern business associations directly from working with Pinchot on Roosevelt’s conservation campaign, changed suit. Even if the railroads could justify the increase, Brandeis argued that the solution lay in introducing ‘efficiency’ into railroading and he promised to show how “1,000,000 DOLLARS A DAY” could be saved by doing so – a boast that lifted the case onto the front pages of the daily papers (the statement in caps was the *New York Times*’ front page headline on November 10, 1910).

Brandeis paraded engineers and businessmen, like Harrington Emerson whose factories employed time study techniques, before a now captivated audience

(Usselman, 2002: 327ff.). Taylor's ideas also caught Brandeis' eye, although he recognized their lack of appeal. Taylor's methods had been called 'functional management' and 'the Taylor System'. In an informal meeting between Brandeis and some of Taylor's followers a more attractive label emerged: "scientific management" (Drury, 1922: 55).

Brandeis knew attaching "scientific" would strengthen Taylor's appeal by suggesting rigor and a method employing the objective power of fundamental laws. The phrase "social science" had caught the public fancy and the adjective "scientific" went far in ensuring any appeal to the public of at least an interested hearing (Lippmann, 1914; Mowry, 1958). "Efficiency" and "scientific management" became the two catchwords of the popular excitement that followed the Eastern Rate case.

On the crest of this wave of interest, Taylor quickly released *The Principles of Scientific Management*. There was nothing very new about the content. Effectively it was the work that the ASME had rejected the year before and a continuity of his 1895 paper. However, it had a new title and the moralism was toned down. The emphasis on efficiency was now also completely explicit (it is the object of the first five paragraphs of *Principles*), giving his method the appearance of a neutral device. The book was serialized in *American Magazine* just as "an efficiency craze" or a "secular Great Awakening" hit America like a "flash flood" (Haber, 1964: 52). Roosevelt's continued exhortations; the Eastern Rate Case; and the scientific-mechanistic optimism of the day saw the creation of efficiency societies and publications devoted to efficiency (e.g., *Health & Efficiency*). Groups from women's consumer leagues to school boards to the Protestant church pressed their constituents to investigate how they might become 'more efficient'.

America's unique 'melting pot' demographic during this period – as a burgeoning diverse workforce without a common language sought to combine to meet a seemingly insatiable demand for goods – made scientific management (and its focus on breaking things into simple mechanistic terms in the name of efficiency) appear a necessary and good device (Cummings, 2002). And this melting pot dynamic also encouraged Roosevelt and the Progressives toward further associations between efficiency and what it meant to be good.

The burst of immigration that led to increasingly obvious ethnic communities caused what Roosevelt called the problem of "hyphenated-Americans" (e.g., Italian-Americans, Irish-Americans). Roosevelt (in Hagedorn, 1957), and other progressives like Woodrow Wilson, began to speak of there being "no such thing as a hyphenated American who is a good American"; of how "we must have fundamental common purposes". Roosevelt appealed "to all Americans to join in the common effort for the common good", claiming that "The prime problem of our nation [now was] to get the right type of good citizenship". What this good all-Americanism actually meant was difficult to articulate until efficiency was applied. Roosevelt (in Hofstadter, 1963: 132-48) began to relate efficiency to what was termed his "New Nationalism":

National efficiency... a necessary result of the principle of conservation widely applied... will determine our failure and success as a nation. National efficiency has to do, not only with natural resources and with men, but it is

equally concerned with institutions. The state must be made efficient [and] the American people are right in demanding that New Nationalism.

By 1912, 'efficiency' was one of the Progressives' foremost catch-cries. Indeed, Progressivism's most famous slogan "100% Americanism" was proudly derived from Emerson's phrase "100% Efficiency" (Higham, 1955). That "Americans love efficiency" had entered into the national fabric (Haber, 1964: ix).

Events such as the Great War and increasing industrialization saw efficiency spread into the fabric of other countries. While in 1917, when Seldes (1917) reported on the spread of Scientific Management into Britain, he indicated the strange sense in which he was using the word by labeling it "American Efficiency", by the 1920s Taylorism and the general goodness of mechanical efficiency was growing in places like the England, France and Russia.

In such a climate, one might begin to believe that the insightful Aristotle would see things in similarly mechanical shapes, and advocate efficiency too. But, in effect, it is the formation of the age that has imposed efficiency on Aristotle and made possible the quotation that begins Barnard's book. And, moreover, makes this improbable legitimating point of origin appear perfectly natural to its readers.

We tend to assume that management has existed for as long as man, its basic principles evolving over time toward a major discontinuity early in the 20<sup>th</sup> century: a revolutionary advance where emotion and subjectivity was stripped away and replaced by objectivity and a scientific approach. While the scientificity of Taylor and his peers is now widely questioned (Shenhav, 1995), they are still seen as revolutionary pioneers who brought rationality to bear on a problem that had troubled man throughout the ages (Gross, 1964; George, 1968; Child, 1969; Wren, 1994; Tsoukas & Cummings, 1997). Hence, the beginning of the 20<sup>th</sup> century is seen as a key origin and the pioneering age of management: the birth of 'management proper' or "management the discipline" (Duncan, 1990: 2). Behind this, noble roots are often traced, generally leading to a continuity of great, but more simplistic, thinking by the likes of Aristotle, Plato, Jesus, Benjamin Franklin and Charles Babbage and great civilizations like the Chinese, the Romans and the Egyptians. But these precedents are only highlighted to show how the 'greats' thought in ways that were similar to, or could be built upon by, management experts in the 20<sup>th</sup> century (Mooney, 1947: 4). Thus, a continuity is identified between great civilizations like the Egyptians and Management pioneers because to build the pyramids they must have had specialized labour, standardized processes, a minimum wage and recognized the importance of efficiency (e.g., George, 1968; Robbins, 1991).

However, the counter-history above questions the key discontinuity here: the founding documents of management studies, like *The Principles...*, were not particularly revolutionary and they were just as expedient, political and subjective as what preceded them. Moreover, it discounts the notion of a noble continuity. Management as we know it did not exist until a particular context made efficiency the problem. The past was then recast using the terms of that age. The emergence of this object created a corresponding subject in the early 1900s in industrial America. Attempts to back-fill a history behind that (a history reifying the 'remarkable'

achievements of management's pioneers and legitimated or made noble the work of management in the present), should be treated with caution.

The subject/object of management is a formation shaped by a multiplicity of lines of explanation converging in a particular context. Some are acknowledged, emphasized and reinforced by the histories of management mentioned in the opening paragraph of this paper: the professionalization of engineering and the military, a mechanical worldview, New-world pragmatism. These lines form the historical assumptions that students of management encounter, should they encounter history at all. Other lines though are not recognized: a thinly veiled 'old-fashioned' moralism, an ambitious lawyer, a political party in search of a saleable manifesto, the 'melting pot' context and an attempt to diminish diversity. These converged to make efficiency the problem and promote management, as written by 'management's pioneers', as the solution.

While these historical foundations have produced management as we know it, they have also repressed alternatives. In a typical introductory textbook summary, Robbins (1991: 31) describes the "breakthrough" in management represented by the pyramids as follows: "someone had to plan what was to be done, organize people and materials to do it, lead and direct the workers, and impose controls to ensure that everything was done as planned". Nothing in such writing introduces management initiatives to possibilities other than what management was defined as being about in the 20<sup>th</sup> century: for example, the unique spiritual or religious or aesthetic or political/power dimensions of this different episteme. How might management studies be different if it did? Recognizing the not wholly noble, expedient and contextual nature of management studies' assumed historical foundations should encourage us to question their authority and think otherwise about what management could be.

This counter history has been brief. But it could lead into deeper counter-historical research. For example, inspired by Foucault's Early Works we might examine whether rather than earlier people not properly or only partially recognizing the importance of management, they held views that were a more essential or truthful basis for management than that prevalent since the problematization of efficiency in the early decades of the 20<sup>th</sup> century?

Using an Archeological perspective, further investigation into the particularities of the episteme that prevailed in the US, and the subsequent spread of this way of thinking to the rest of the world, might reveal interesting information about why and how management emerged and grew as a subject in the 20<sup>th</sup> century. It might also cause us to question the quest to make management studies appear scientific and wonder whether other approaches might be more in keeping the object of management.

Genealogy might help us to examine how the unquestioned duplication of various elements (e.g., the acceptance of management histories written in the 1950s and 60s, the standard business school curriculum – which does not include history) have networked together to normalize the origins of management proper and prevent seeing other ways of relating to management.

Finally, having seen management studies founded upon a contingent episteme and network, Interpretive Analytics might lead to the construction of a dispositif of alternative ‘managements’ drawn in terms of the different problems faced in other ages – alternatives that could aid thinking differently about management today.

## **THE NATURAL FORM OF MANAGEMENT’S DISCIPLINARY FOUNDATIONS**

“Economics has traditionally provided the only theoretical framework for the study of business, and even today the two fields are so closely related they can hardly be discussed separately.”

Excerpt from Pierson’s, *Education of the American Businessman* sponsored by the Carnegie Foundation and sanctioned by the AACSB (1959).

“Mathematics, geometry and drawing, book-keeping and penmanship, correspondence and the correct use of the English language, geography, technology, law, economy, history and biography, modern languages. Ten subject areas, to be studied as equal parts.”

General Robert E. Lee’s curriculum for a Business School at Washington College, now Washington and Lee University (1869).

In August 1865, Judge John W. Brockenbrough, rector of Washington College, a “wholly inauspicious” institution in Lexington Virginia, called at the home of retired General Robert E. Lee (Lee Jr., 1905: 182; Riley, 1922: 9). He came with the news that his Board had unanimously elected Lee President of the College. Lee believed in the resurrectory powers of education, but had never considered such a career (Lee, in Jones, 1906: 91, 117-18, 214). Advisors cautioned that institutions of far greater standing would eagerly have him as a ceremonial head if he so wished. But Lee accepted the Judge’s offer. He did not want a nominal position and argued that Washington’s need gave the position “greater dignity” (Freeman, 1935: 216-7).

The second introductory quotation above contains a business curriculum from a report by a committee chaired by Lee. It was presented to Washington’s Board of Trustees on January 8, 1869. It was one of many initiatives that Lee spearheaded toward introducing more of what he termed “practical education”.

Lee’s innovations created waves. The *Richmond Dispatch* (May 1, 1869) proudly quoted the *New York Herald’s* prediction that Lee’s initiatives were “likely to make as great an impression upon our old foggy schools and colleges as [General Lee] did in military tactics upon our old foggy commanders in the palmy days of the rebellion”. However, Lee’s death in 1870 and the College’s subsequent inability to raise the necessary funds prevented the School’s establishment (Marsh, 1926), and

these waves are now long forgotten. In the realm of business history they lay buried under the accepted view that the pioneer school is Wharton, established in the 1880s. In a wider scheme, time has seen this portion of Lee's life edited out (Holden Reid, 2005). Douglas Freeman's (1935) four volume *R.E. Lee*, the only source that details Lee's last years, was widely read in 1935 when it won the Pulitzer Prize. But it is now published in a one volume abridged version where most, apart from Lee's military heroics, has been cut.

Lee's curriculum now seems quaint, fanciful and other-worldly. From another episteme, as it were. It is certainly eclectic and broad. In this way it might be connected to recent radical proposals for changes to the way business is taught (Mintzberg, 2004; Bennis & O'Toole, 2005).

In the late 1950s, however, the ground was different. The two most important studies influencing the development of management education were published in 1959: Gordon and Howell's (1959) *Higher Education for Business*, sponsored by Ford; and Pierson's (1959) *The Education of the American Businessman*, sponsored by the Carnegie Foundation. Both reports were sanctioned by the American Association of Collegiate Schools of Business (AACSB). The authors of both collaborated closely and came to similar conclusions. Primary among these was the view expressed by in the quotation above Lee's curriculum: that economics provides the only theoretical framework for the study of management, and that the standardization of curricula must therefore be based upon it. But if economics seemed the obvious foundation in the 1950s, and indeed to the authors of AACSB sponsored revisitation of the issues 30 years on (Porter & McKibbin, 1988), why was it not obvious to Lee's committee eighty years earlier?

Seventeen years passed between the establishment of the Wharton School and the next university-based business schools in 1898: at the Universities of Chicago and California. But then they spread quickly. Sixty-six new schools were established in the 1930s. By 1950, 159 new schools of business established had been founded in the US with 600 colleges granting a variety of business degrees to 370,000 students (Anglo-American Council on Productivity, 1951). Lyndall Urwick (1954: 14) noted that "this very rapid growth... geared to the national interests in business as an occupation and in line with the stupendous development of the American economy during the same period, has created many problems".

Primary among these new problems was that this unplanned growth made it more difficult to see management or business as a serious academic field: a worthy, grounded and necessary part of any University. Playing a large part in countering this problem was the formation of centralized bodies that would ensure that Business Schools were properly standardized and policed. In the early 1950s, the recently formed AACSB began to exert considerable influence. It required that schools seeking membership offer instruction in the areas of economics, accounting, statistics, business-law and finance (McKenna, 1989).

The Ford and Carnegie studies built upon this, identifying the main problem as being that "dozens of minor fields of specialization have been permitted to develop that never should have been introduced at all" (Gordon & Howell, 1959: 217); and that "there is a need for a general tightening of standards in terms of the scope of

the core studies” (Pierson, 1959: 196). Pierson (1959: 233) complained that management was “a vague, shifting, rather formless subject in which neither the foundations at the undergraduate level nor the super-structure at the graduate level can be sharply defined”. Both reports subsequently called for the management curriculum to be rationalized and secured upon a solid academic foundational core. For Pierson, economics provided the “only theoretical framework”, while Gordon and Howell’s model built upon three disciplines: behavioral sciences (psychology and sociology), applied mathematics and also, but primarily, economics.

By the 1960s, mathematics was losing favor, leading to the adoption of three cores: economics, psychology and sociology (Gross, 1964; Leontiades, 1989: 18; McKenna, 1989: 46; Pettinger, 1996). However, a clear pecking order emerged. While “economics, psychology and sociology are all to be found in varying degrees... the high prestige of economics – in academic circles at least – has meant that it has been the dominant discipline” (Mosson, 1967: 198).

In solving the problem of standardization, these writers also saw through the prevailing organizational shape of the age: the hierarchical triangle. At the base of the curriculum were ‘contributing subjects’ like psychology and mathematics. At the apex, courses in business policy or corporate strategy would be prescribed. And running up through the core from base to apex, holding the curriculum together, would be economics. This became the norm for any good business school. Being otherwise became increasingly unlikely.

But the foundational position of economics can be shown to be contingent. Indeed, while “the science known as economics” had, by the mid-1950s, “often been defined as the social science of business” (van Metre, 1954: 7), this form can be seen as the result of a formation specific to the mid-20<sup>th</sup> century.

To begin, it is important to remember that the authors of the 1959 studies were economists and that, naturally, their works “bear the unmistakable imprint of the philosophy of economic science” (Leontiades, 1989: 2). It is not surprising that they might see economics as ‘the answer’. However, they did not presuppose or create the link with economics out of thin air. The connection had begun to form in earlier decades. While a 1926 article on Lee’s “forgotten” curriculum, remarks on the similarity between it and the “present-day curriculum” of a business school, “commonly organized around the five functions of business, namely, finance, production, distribution, accounting and management” (Marsh, 1926: 658), ten years later Freeman (1935, Vol. 4: 427) notes that while Lee’s school was “similar in many respect to those established in recent years in the United States... it did not cover economic theory so fully”. Why and how did the connection between business education and economics strengthen between these two dates?

Locke (1989: 5) claims that before being accepted as worthy members of the academic fraternity, the problem Business Schools had to overcome was to build a connection between what they taught and an accepted scientific discipline:

The gap, moreover, was hard to fill, for it was not a question of finding an existing bridge between theory and practice, one that had been shrouded in a fog of haughty academic prejudice, but of building a bridge between the two. People who established business schools in institutions of higher

education quickly learned this lesson for there was, at the outset, no discipline to teach. Science-based management had to be invented.

Such an invention could not have been fashioned with economics in the 1860s: economics was a marginal concern when Lee's committee cogitated. At this time, most economists were Institutionalists. This school drew from Adam Smith's more historical and humanistic interests. Inductive and non-theoretical, it encouraged research into specific socio-economic contexts. It was unlikely to gain acceptance from the 'Academy', which, at this point, consisted of the traditional arts, the formal or pure sciences (e.g., mathematics) and the empirical sciences. Institutional economics was not a traditional art, nor did it replicate the form of a science.

However, another economics emerged in the second half of the 19<sup>th</sup> century. Abstracting economic behavior away from particularities, the Neoclassical school offered a more exacting expression of Smith's assertion that the pursuit of individual self-interest produces an optimal social outcome. For Neoclassicists, economics' key concepts (e.g., marginalism, utility maximization, equilibrium) were comparable to physics and could be mathematically expressed (Toohey, 1994). They sought an economics that "resembles the physico-mathematical sciences in every respect" (Walras, 1954: 71); where one body, like a particle, could be anybody, as all were of the same matter or genus (rational-economic man) and thus subject to the same economic/mathematical laws (Mirowski, 1986; 1989).

Modeled on physics and connected to established disciplines through the language of mathematics, neoclassical economics came to be accepted as a science, becoming a worthy academic subject as the first recognized business schools emerged around 1900. So why did management and economics not form the allegiance that would lead to the establishment of a generic business school curriculum at this juncture?

The Neoclassicists dismissed empiricism. According to Jevons (1888: 18, 21), the science of economics' "ultimate laws are known to us immediately by intuition or at any rate are furnished to us ready made by other mental or physical sciences." Hence, he explained that we can make "simple inductions on which we can proceed to reason deductively with great confidence. From these axioms we can deduce the laws of supply and demand... and all the intricate results of commerce."

By converting economics into abstract model building, Neoclassicists moved away from problems of causation, with which the empirical sciences were concerned, to problems of functionalism (i.e., perfecting models). Consequently, their propositions would be stated in mathematical calculus and Neoclassicists could abstract to the point where Marshall complained that for them man does not make particular things: "he only produces utilities" (Bell & Kristol, 1981: 56).

This offered little to managers. The Neoclassicists were concerned to express the mechanism of the market as a whole, which the manager had no direct influence over. Their theory of the firm thus treated organizations as "a black box, an unknown, a problem that has already been solved" (Locke, 1989: 15). It assumed managers knew how to run firms, and so stopped at the point where the manager wanted to begin. In short, Neoclassicists had nothing to say to managers. Moreover, they were not particularly interested in communicating with them.

Events in Wharton's first decades demonstrate this. The early Wharton professors were of two types. There were either those, who found their "material in the business world, not in the universities (in science)" and of whom it was said, disparagingly, that "[d]espite their energy and enthusiasm, their scholarship had essentially been an extended form of business journalism" (Sass, 1982: 268). Or, alternatively, they were teachers who came from other faculties to teach traditional academic subjects as part of the curriculum. Among these were economists.

However, the Neoclassicists were cool to the practical descriptive thrust of Wharton's business programs, let alone interested in teaching on them. Those who did deign to teach there were criticized for having nothing of relevance to say to their classes. Looking back from the 1950s, commentators expressed surprise that: "[e]ven the economists in th[is] group, whose discipline necessarily called for some acquaintance with business aims and practices, were wont to seek enlightenment more largely by speculative than by strictly scientific [i.e., empirical] methods" (van Metre, 1954: 3-4). While commentators in the 1950s might be astonished that economists should be unacquainted with the empirical world of business, this necessity was not seen in earlier times. This passage, written in 1919, expresses what many saw then as an irredeemable divide between management and economics:

Economics and business economics [may] handle... the same material but they do not have the same spirit. Economics is a philosophical science with philosophical characteristics. Business economics is, on the other hand, an applied science. Chemistry and mechanical technology are closer in spirit to business economics than is economics (Schmalenbach, 1919: 258).

Economists' inability to test their hypotheses in the established manner of the empirical sciences (under laboratory conditions), made it contingent for the subject to adapt into a pure science to join the club of accepted academic subjects. But mathematical advances in the early 20<sup>th</sup> century, brought statistics to a point where its workings could become a substitute for laboratory experimentation. Some economists, tiring of Neoclassical rigidity, subsequently found mathematical statistics liberating. As economists adopted statistics, econometrics was born.

Econometrics' probability-based mathematics enabled decisions to be weighed in a form that seemed to provide advice for managers *and* leave room for judgment – without undermining Neoclassicism's principles. However, it still did not speak a language that managers could relate to. For this to happen, algorithms, sets of rules or routines by which things could be carried out but not necessarily expressed in mathematical symbols (that could be related to neoclassical theory but with apparent 'operational significance') had to be developed.

From the late 1920s, economists began to explore the business implications of mathematical algorithms in developments like 'game theory' (Von Neumann & Morgenstern, 1944). This kept economics connected to its mathematical roots, while bringing it into contact with the realm of electrical engineers developing the linear programming of early computers. These engineers used Boolean logic to provide algorithms that could be adapted to enable businesses to define goals in terms of individual optimal quantities of inputs and outputs, and obtain specific

directions about how to achieve these goals stated in terms of the various steps available to the firm (Dorfman, Samuelson, & Solow, 1958). By the 1930s, Neoclassical economics, econometrics and the advance of engineering to incorporate greater levels of complexity, were combining into a new field termed 'business economics'. It was this form that enabled Management to bridge the divide necessary to be taken seriously academically, a bridge that granted *academic gravitas* and supplied methods that could be *usefully applied* by its students.

Consequently, van Metre (1954: 7) was able to praise the part played by the recent "evolution of economics" in the development of business education:

A highly interesting and unforeseen development which has paralleled the growth of business education in American universities has been the transformation in the science known as economics... Economists are today treading the paths of science in search of signposts to economic truths, rather than scanning the skies of speculative thought...

Or, as Gross (1964: 195) puts it: "as economists came more and more to grips with the realities of the world, the[y] began to make many substantial contributions to administrative thought." Unlike in 1919, by the 1930s business and economics, in some manifestations at least, began to share the "same spirit". And, by the 1950s, it might appear, to the short-sighted at least, that economics was the natural or only foundation upon which to found a business curriculum.

However, this counter-history has shown this foundation to be contingent upon the conditions present when the standardization of the management curriculum was identified as a problem. At this point in time, a particular type of economics had emerged that seemed to provide a set of ideas both applicable and useful to what people saw management studies as being about. Moreover, because this economics was an accepted university discipline, the link expediently added credence to management studies being taken seriously as an academic subject. This association with industrial economics has likely shaped or produced particular ways of seeing the object of management, while repressing others. However, in a different context or a different point in time other problems and conditions would have led to other alliances seeming more natural and produced different forms of management.

In addition, management's assumed natural disciplinary foundations were formed not by a positive evolution but by a multiplicity of events. Some are acknowledged, like the changing shape of economics (albeit framed in the positive language of a continuity: i.e., the 'evolution of economics'); others are not: the fact that no obvious foundational backdrop had led to all sorts of curricula being established; the need to find a bridge into the academic establishment to make management studies seem more credible and which would encourage 'serious academics' to teach on management programs; the writing of histories that made the link to economics appear natural (Gross, 1964; Pollard, 1974). Furthermore, this formation could only gain ground given the establishment of the particular problem/subject/object of efficiency/management studies/management early in the 20<sup>th</sup> century, described in the previous case.

At the same time, this counter-history enables us to question key assumed continuities, like the evolution of the natural management curriculum, and the

notion that there is one economics, and assumed discontinuities. For example, instead of seeing recent proposals for changes to the way business is taught as revolutionary, it might be more fruitful to argue that these calls are not radical in the revolutionary sense but in the sense of returning to roots laid prior to the 1930s.

We could use Foucault's different approaches to interrogate these questionable foundations further. Inspired by Foucault's early works we might wonder whether Lee's curriculum, buried by more recent developments and conventions, is actually closer to an ideal. How might managers be different given such an education and what would the advantages would be?

Archaeology might direct us to examine how the prevailing management or business curriculum will be shaped by the episteme in which that curriculum was first developed. Hence, we might wonder what our curriculum might be if Lee had lived longer, or had been at a wealthier or more prestigious school, and his model established itself as the norm. What if the curriculum became standardized not in the 1950s but in 1870? Or 2010? Or if we approached the problem with a shape other than a hierarchical triangle in our heads: an organigraph perhaps?

A genealogical approach might investigate how elements since the 1950s have become a formation that maintains and protects the business school curriculum that emerged then? How might such a formation resist current calls for an overhaul of management education? Do the increasing pervasive international accreditation bodies, for example, help or hinder substantive innovation in this regard?

And, having seen, through an interpretative analytical lens, how it is the combination of an episteme and network rather than any essential foundational imperative that makes management's disciplinary foundations and standard curriculum what they are, might we be further inspired to think anew and otherwise by creating alternative curricula based on different historical scenarios?

## CONCLUSION

The interpretations of Foucault's work presented here are but one but model and two cases for encouraging further debate and interrogation of management studies and its connection to history. Further models, further counter-histories and further discussion are imperative if we are to unlock the possibilities for the future that a desire to seek a greater connection to the past might bring. Indeed, to paraphrase Nietzsche (1974: 34), who knows the forgotten potential that might be brought to light once we place history "in the balance".

The Greeks, to whom Foucault looked to refresh his vision and find a way round his last methodological turn, had a useful way of viewing models and cases in such a way. In Plutarch's (1960) words, from his introduction to *Pericles*:

A colour... is well suited to the eye if its bright and agreeable tones stimulate and refresh the vision, and in the same way we ought to apply our intellectual vision to those models which can inspire it to attain its own proper virtue through the sense of delight they arouse. [Such a model may] rouse the

spectator to action, and yet it does not form his character by mere imitation [instead] it provides him with a dominating purpose.

It is hoped that this presentation of Foucault's counter-historical thinking might give purpose to others to interrogate and destabilize assumptions in management studies. To inspire others to use history for perhaps its most active and compelling purpose: refreshing our vision of ourselves and what we might otherwise wish to be.

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