Is there commensurability between Burns and Stalker's *The Management of Innovation* and research applications of their ideas?

Miriam Green, London Metropolitan University, Holloway, London N7 8DB

m.green@londonmet.ac.uk

work in progress – please do not quote

Introduction

This paper problematises representations of an organisation/management theory in terms of mainstream organisation textbooks and in research applications of these interpretations in management accounting research. The textbook in question is *The Management of Innovation* by Burns and Stalker (1961, 1966). It is argued in this paper that representations of this theory and its applications in management accounting research have almost exclusively focussed on one small section of the book, in which an idealised spectrum of organisation structures is suggested to match contingent environmental conditions.

An evaluation of these representations brings to the fore problems of representation generally, as it does attempts to establish definitive meanings of texts, given post-structuralist arguments such as Barthes’ (1977) ‘death of the author’, Foucault’s (1981) ‘violence’ with regard to exclusionary discourses and Derrida’s (1976) concepts of *différance* and ‘supplementarity’. What this research has sought to establish so far is that the original text and its mainstream representations constitute ‘competing discourses’ (Fairclough and Ginny 1997).

It is proposed to take further the possibility of establishing the relationships between representations of Burns and Stalker’s ideas in both organisation textbooks and management accounting research with the original book by exploring their locations within paradigms. The aim is to see whether these various works can be shown to be within the same or different paradigmatic boundaries. If it can be established that there is sufficient paradigmatic difference between them, the validity of these representations can then be questioned in terms of their epistemologies and the pedagogical implications of the types of knowledge produced.

Importance of ‘*The Management of Innovation*’

Burns and Stalker’s work, along with other contingency theories, has been very popular from the 1960s onward in both the organisation and management accounting area. It filled a need for explanations as to how organisations should deal with the changes and challenges they were beginning to face in the second half of the twentieth century. Erstwhile theories of classical and scientific management and human relations were not able to deal with increased global competition, a decline in protected markets, rapid technological and product innovation and volatile market demand (Ashton et al 1995).
These ideas were widespread in the organisation/management field as evidenced by their inclusion in a large proportion of textbooks in this area. Burns and Stalker’s ideas were among the best known. They were taken up also by management accountants and were widely used as a basis for their research into organisation structures and control systems in prominent journals such as Accounting, Organizations and Society.

Contingency theories took a step away from previous organisation theories which had assumed largely closed systems without taking into account external factors. Various explanations were offered linking organisation structures with a variety of variables. This was done with a view to answering which type of organisation would be most effective in different environments. Woodward (1958) linked organisation structure with production technology as the most important variable; Pugh et al of the Aston School pointed to various contingencies such as size, production, technology and external environment as being important relationships to organisation structure (Otley 1995). In their ideal types of ‘mechanistic’ and ‘organic’ structures, Burns and Stalker took elements from previous classical theories and from humanistic psychological and motivation theories, but made these ideas more flexible and responsive to particular contingencies in the external environment (Burrell & Morgan 1979).

Their book is based on research published in 1961 about companies dealing with new technologies in a rapidly changing market. Burns and Stalker researched firms in England and Scotland and came to the conclusion that for the achievement of success, organisation structures had to fit in with contingent factors in the environment, the main variable being the market. Where the market was stable organisations could function effectively as ‘mechanistic’, hierarchical systems of communication and decision-making; when the market was volatile these systems would be more effective if they were ‘organic’ with more decentralisation, a looser definition of roles and more power for experts over managers (Donaldson 1996). As will be seen, this is where the analysis stops for most mainstream interpretations. However, the book is about much more than this – largely, in fact, about how difficult it is successfully to change from mechanistic to organic structures.

**Representations of Burns and Stalker’s work**

The representations discussed here are mainly from two US textbooks, which are indicative of the vast majority of interpretations of Burns and Stalker’s work. Both Daft (2001) and Robbins (2003) are popular, mainstream textbooks in the UK as well as in the US and have run into seven and ten editions respectively. What we are told about *The Management of Innovation* from these (and most other texts) is the ‘mechanistic – organic’ spectrum regarding organisational structure. As Burns and Stalker argued, where the market and technological conditions are stable it is appropriate and cost-effective to use a mechanistic or hierarchical organisation structure; where these conditions are unstable an organic or more flexible, decentralised structure is more likely to lead to success for the company. This continuum or idealised model, along with more detailed definitions of what is meant by ‘mechanistic’ and ‘organic’ systems is usually all the information given about Burns and Stalker’s work (Daft 2001:144-145; Robbins 2003:440).
An assumption behind this description is that these determinants of structure can be achieved unproblematically, which, as will be seen from the preface to the 1966 edition of *The Management of Innovation*, is not at all how Burns sees structural change. An additional assumption is that it is within management’s capability to do this. Thus, Robbins, after describing Burns and Stalker’s idealised model argues that:

“An organization’s structure is a means to help management achieve its objectives …. If management makes a significant change in its organization’s strategy, the structure will need to be modified to accommodate and support this change.” (Robbins 2003:440)

More eminent writers perhaps, such as Lawrence and Lorsch, themselves often linked with Burns and Stalker and others as belonging to the school of organisational contingency theorists, also portrayed Burns and Stalker’s ideas with the same specific, narrow focus:

“… Burns and Stalker found that organizations that were profitably coping with uncertain, changing environments have a low degree of formalized structure (‘organic’), instead of the higher degree of structure (‘mechanistic’) associated with financial success in more certain environments.” (Lawrence & Lorsch 1967a:6)

**Burns and Stalker’s text: *The Management of Innovation***

As mentioned above, the idealised continuum of mechanistic and organic and its matching to conditions of stability and change constitutes only a tiny section of Burns and Stalker’s book- about seven pages out of a total of over 250. This, of course, does not mean to say that therefore the continuum is not important, nor that it is not central to the argument of *The Management of Innovation*. However if one looks at the preface of the 1966 edition of the book, an alternative picture emerges – one, broadly, that presents not insubstantial difficulties in achieving a change of organisation structure, and perhaps even more importantly, portrays the difficulties (and successes) as being the result of human agency rather than structural change alone.

So, for example Burns in the preface to the 1966 edition set great store by the abilities of the chief executive to assess and act on the situation in which the organisation found itself. Conversely, many of the difficulties in achieving a change from mechanistic to organic structures depended on employees in various roles and at various levels of the organisation. Other barriers to achieving organic structures included bureaucratic force of habit, which resulted in overload for senior management who would be consulted by employees once their erstwhile (middle) managers had disappeared in a new decentralised structure. This was described by Burns as one of the ‘dysfunctional’ or ‘pathological’ responses to structural change (Burns 1966:ix-x).

The sectional interests of managers who were displaced or promoted according to the fortunes of their departments; various interests of the multiplicity of different groups; individuals at all levels concerned to extend their power and control, to increase their value to the organisation;and the career interests, of the new industrial scientists all played a part in influencing the way new structures would work in practice. Later in the book, it was argued that the degree of integration into the firms by the new electronics
research and development engineers employed to develop the emerging computer technology was one of the determinants of a successful transition to an organic structure (Pugh et al 1964). Finally, Burns argued against analyses of organisational change in terms of ‘structured immobility’ as against preferred ‘dynamic’ studies of process, taking into account the constant ‘interplay and mutual redefinition of individual identities and social institutions’, and the essential ambiguity of social experience (Burns 1966:xvi).

Problems with representation

One might, at a glance, agree with the tenor of this paper that these are rather different interpretations of Burns and Stalker’s book. However, recent literature both on representations and on the meanings of texts show how problematic this can be. In a previous paper the author highlighted problems of representations first of external ‘realities’ and then of texts (Green 2005).

The notion of an ‘objective’ portrayal of commonly agreed external realities has been criticised certainly from social anthropologists writings in the early twentieth century. More recently, writers from various sociological perspectives including hermeneutics, critical theory and post-structuralism have continued to contest this idea. Among counter-arguments are the partial information available to researchers; their and their informants’ ‘situatedness’ (Sarbin and Kitsuse 1994) and the context and power relationships within which they are writing - all of which influence the type of knowledge produced (Alvesson & Deetz 1996; Oswsick, Keenory & Grant 2000). Ontological assumptions about what constitutes ‘reality’ would also influence the subject of what was researched and how it was presented. What constitutes reality is of course highly pertinent to organisations also. Is it structures and formalised processes or, as post-structuralist writers have argued, are they illusory (Alvesson & Skoldberg 2000)? For a fuller discussion on this see Green (2005).

These problems may be more severe when it comes to the representation of texts, which in this case are the representations of a representation (of the research done by Burns and Stalker). In addition, as Kuhn (1970) argued, the representation of a theory had to be a summary, and in the case of scientific textbooks, were simplifications which wrote out of the representation the disputes, struggles and contingencies that enabled some theories to become ‘science’ and others not. Similarly, scientific researchers did not apply the full theory to their work but abstracted from it a narrower set of ‘rules’ (Kuhn 1970:43).

As shown above this is true also of representations of Burns and Stalker’s book, where the mechanistic-organic continuum is emphasised to the exclusion of the ‘human’ factors mentioned by Burns in 1966 which could ‘make or break’ the success of organisational change. This narrowing of the ‘rules’ applies also to other texts in the management/organisation area. Lawrence and Lorsch’s contingency theory for example, along with its well known concepts of structural differentiation and integration in organisations mentioned in all the textbooks, come the behaviour and personality of employees at different levels in the organisation and perhaps most important, conflict resolution (Lawrence & Lorsch 1967b). For more details see Green (2007).
Problems with meanings of texts

The problem of coming to a decision about the validity of the representations outlined above of Burns and Stalker’s book is compounded by structuralist and post-structuralist strictures on the possibility of arriving at definitive meanings of texts (Green forthcoming). Barthes (1977), for example, argued that a text was not the sole creation of a writer, as s/he was influenced by cultural and historical influences and a ‘tissue of quotations’ from other texts. Thus it was not possible to identify clear authorship. The reader was similarly influenced which would affect her interpretation of the text. Barthes came down in favour largely of the reader’s interpretation, proclaiming the ‘death of the author’ (Barthes 1977:148).

Derrida also argued for the impossibility of deciding on finite meanings of texts. His concept of difference is concerned with the idea that words always have connections with other words and the consequent likelihood that their meanings can change in different contexts (Derrida 1976). His concept of binary oppositions or ‘supplementarity’ further challenge the notion of meanings of texts being clear. Binary opposites, prevalent in western philosophy and social thought according to Derrida, needed to be ‘deconstructed with a view to examining the ‘weak’ opposite, thought not to have nearly as much power as the ‘strong’ opposite.

Supplementarity disprivileges overt meanings (or the strong partner of the binary opposite) in texts so as to uncover the oppositional, weak or hidden aspect in the text (Derrida 1972/2002). This again shows up the difficulties involved in trying to arrive at a definitive textual interpretation. However there seems to be a possible way through this problem with Derrida, more so than with Barthes. Derrida was more accepting of the author as one (but not the only) source of meaning one can derive from the text. Surer ground, perhaps, for others attempting to deconstruct texts is Derrida’s insistence on a ‘patient and minutely philological ‘explication de texte’ as he himself did with regard to numerous texts in philosophy and social theory (Culler 1983: 23)

Foucault, for different reasons and at a higher societal level of analysis, also argued that authorial intentions were not significant as writers were governed by the rules, structures and forms governed by the epistemic imperatives of their age (Burke 1998). What they wrote was also governed by power relationships and presented only a partial view of reality (Foucault 1981). This certainly seems to be the case with the interpretations of Burns and Stalker mentioned above. For a more detailed analysis of these authors’ arguments about meaning in this context see Green (forthcoming).

Content, critical discourse analysis and deconstruction

To begin to overcome these difficulties a content analysis was undertaken in which the emphasis given by Burns and Stalker to various issues was analysed in terms of the importance placed on these issues and the amount of space given to them in the book. What was also analysed was their approach to the ‘concreteness’ of formal structures – emphasised by mainstream representations of The Management of Innovation – but strongly problematised by Burns and Stalker. Contemporary organisation theorists quoted by Burns and Stalker were also discussed with a view to showing what Burns and Stalker themselves saw as germane to their argument. The analysis showed that the initial
differences between mainstream representations of their work and the preface by Burns in the 1966 edition were upheld (Green forthcoming).

A critical discourse analysis, based on some of Fairclough and Hardy’s (1997) criteria again showed substantial differences between Burns and Stalker on the one hand, and Daft and Robbins on the other in terms of different ontologies as to what constitutes reality in organisations, different perceptions and different political assumptions. So for example, ‘nominalisation’ or abstraction / objectification (in this instance of social structures) was much more prevalent in the textbooks than in *The Management of Innovation*, where the role of employees was much more clearly seen as a participating one with influence over formal structures (Green forthcoming).

Derridean deconstruction, in particular his concept of binary opposites, also serves to highlight differences between these two types of text. In terms of organisation structures one would then look behind the ‘powerful’ formal structure to the informal structure and see to what extent the latter was actually driving the former. Certainly Burns and Stalker, quoting Selznick (1948), point to the vulnerability of formal structures to informal groups representing sometimes contrary interests to official policy (Burns & Stalker 1961:99). For a fuller discussion see Green (forthcoming).

**Paradigm ‘deconstruction’**

So far it has been argued that there is substantial additional material in Burns and Stalker’s book than in the textbook representations discussed. It has also been shown through critical discourse analysis and Derridean deconstruction that there are substantial differences in approach to the issue of organisational change between the two types of text. However, it can nevertheless be argued that this still leaves wide open judgements about the validity or ‘accuracy’ of these representations because of problems of representation and also because of the strong and eloquently presented points made by the post-structuralist writers mentioned above.

The main part of this paper is concerned with a further effort to arrive at an evaluation of these representations. This will be attempted through an examination of the characteristics of these two types of text, initially in terms of their ontologies and epistemologies, and later, when considering management accounting research in this area, in terms of methodologies. A useful way to analyse such characteristics, it is argued, is by looking to see what sociological paradigms such characteristics would fall into. Robust conclusions about this would bring closure to doubts about such representations if they are found to be substantially in the same paradigm. If, however, these representations and research applications in management accounting were seen to fall largely into different paradigms, this would open up questions about the epistemological validity of these representations and its implications for the type of knowledge produced.

**Application of Kuh’s ideas**

Paradigm definitions and paradigm boundaries will be used in relation to these texts according to Kuhn’s (1970) seminal work on scientific paradigms and also Burrell and Morgan’s (1979) seminal work on sociological paradigms. Applying Kuhn’s ideas to these texts is problematic in the sense that one has to consider how far his work on
scientific paradigms is applicable to paradigms in the social sciences and more particularly in organisation/management studies. Certainly one substantial difference with the social sciences is Kuhn's analysis of the incommensurability between scientific paradigms. The previous paradigm was rejected once a new one had been established (Kuhn 1970:6). The fact that in the social sciences scholarship in different, overlapping and conflicting paradigms can exist, often with little communication between them, is, as will be seen later, one of the problems faced when trying to determine paradigmatic boundaries for the different texts.

Notwithstanding the above caveat, some of Kuhn’s central ideas can be used to show up differences between the two types of text. According to Kuhn, one of the distinguishing characteristics of a paradigm was that different paradigms would have different ontological positions as to what entities there were in the world and what entities were absent, and how those entities behaved (Kuhn 1970:109). A second prerequisite, reiterated by Kuhn time and again, was the idea that each scientific paradigm would have its own ‘admissible problem’ and ‘legitimate problem solution’ (Kuhn 1970:6). Following on from this, researchers whose work was based on shared paradigms would be ‘committed to the same rules and standards for scientific practice’ (Kuhn 1970:11). The recognised entities would provide a ‘map’ and also the directions essential for ‘map-making’ - theory, methods and standards (Kuhn 1970:109). The result of a paradigm shift would entail a new way of looking at the world (‘handling the same bundle of data as before, but interpreting them differently - placing them in a new system of relations with one another by giving them a different framework’ (Kuhn 1970:85). The world did not change, but the scientist afterwards worked in a ‘different world’ (Kuhn 1970:121).

If the differences mentioned above between Burns and Stalker’s The Management of Innovation and Daft’s and Robbins’ interpretations of their book are placed in this framework, it can be shown that on every count extracted from Kuhn’s book, these texts can be demonstrated to be sufficiently different as to be classifiable in different paradigms; or perhaps more accurately that Burns and Stalker's analysis encompassed more than did its representations, which led it into a different paradigmatic approach. The entities recognised by Burns and Stalker included employees as prominent actors in the fortunes of the companies they studied, including in what happened to their formal structures; in the textbooks, structures were the only 'entity' mentioned, and managers' powers to achieve new structures implied.

Thus the problems, which most of The Management of Innovation is about, are to do with employees, including the chief executive, the technical experts and other employees with their several sectional, political and career interests. Only then, according to this author's interpretation of Burns and Stalker's conclusions, would a change in organisational structure be successful. For them the implied solutions were first to do with the MD's ability to predict and manage the change, employee commitment to organisational change and only then organisational change to an appropriate structure. Research methodology cannot be discussed in this comparison as Daft, Robbins and other textbooks writers did not engage in comparable research. This will be raised later in the discussion on management accounting research.

Burns and Stalker's ideas in comparison with the previous theories mentioned - classical management, human relations and motivation - can be seen to provide a new way of looking at the world. Previous theories, even when ostensibly concerned with employees, as were the human relations and motivation theories, were based on the

7
premise that employees were essentially passive, and that the initiative lay largely with managers to set up appropriate systems and procedures or to use suitable motivation techniques to achieve their goals. Burns and Stalker's attention to the influence of employee 'enactment' (Weick 1995) with regard to the success or failure of managers' intentions including seemingly impregnable formal structures, constitute a very different way of understanding organisational events and processes, with very different relationships between managers and employees, and employees and organisational structures.

**Application of Burrell and Morgan's ideas**

Kuhn's ideas about the commonalities of discrete paradigms are more easily applicable to a comparison between Burns and Stalker's approaches and those of their mainstream interpreters than is Burrell and Morgan’s model. Such a comparison becomes more difficult and less clearly definable in the case of sociological paradigms and the boundaries that these different texts would rightfully fall within. Burrell and Morgan's (1979) seminal work will be used initially as a way of trying to compare Burns and Stalker's work with that of the textbook writers. Management accounting research will be a second point of comparison. The course of this analysis will highlight possible inconsistencies in Burrell and Morgan's position and lead to a revisiting of the construction of their paradigm boundaries.

Like Kuhn, Burrell and Morgan defined paradigms as “founded upon mutually exclusive views of the social world.” (Burrell & Morgan 1979:viii) But unlike natural scientific theories, different sociological paradigms have been followed by scholars without the earlier ones being invalidated as new views and approaches have developed. This has made Burrell and Morgan’s initial difficult task in constructing their paradigm boundaries difficult. Kuhn’s three main criteria for determining the boundaries of a paradigm: the entities recognised to exist (ontology); the determining of problems and their solutions (what counts as knowledge [epistemology]) and rules and standards for practice (methodology) were accepted by Burrell and Morgan as important criteria. However they added others, perhaps not surprisingly, as they were dealing with social affairs and human beings rather than with scientific ideas and objects.

A difficulty that Burrell and Morgan had to deal with was with the theories themselves. It was no easy task to categorise the numerous, often complex theories both on a general sociological level, and then in organisation studies. Very often theories did not have clear and discrete ontological, epistemological and methodological approaches, as will be shown in relation also to The Management of Innovation. Also, as Burrell and Morgan point out, for example, in the case of Silverman, theorists could 'move on' and modify their approaches.

The two of the four paradigms constructed by Burrell and Morgan that are relevant for this analysis are the 'functionalist' and the 'interpretive' paradigms. The functionalist paradigm, in Burrell and Morgan’s construction covers a wide range of sometimes apparently contradictory ontological, epistemological and methodological positions. Most prevalent according to Burrell and Morgan (and also on the most extreme boundary) was social system theory with the most ‘objectivist’ and determinist approach, where reality was regarded as ‘hard’, ‘concrete’ and able to be ‘systematically investigated’
so as to reveal its ‘underlying regularities’ which have a ‘major influence upon behaviour’ (Burrell & Morgan 1979: 127-129).

Burrell and Morgan’s ‘two by two’ model has one axis divided between ‘objective’ and ‘subjective’, which can be related to distinct ontological, epistemological and methodological approaches. Such an analysis would lead to conclusions similar to those derived from Kuhn’s criteria. The second axis, however, which is divided into whether theories support the existing order or are radically opposed to it, is argued here, muddies the water. Theories that may on all other grounds be seen as largely incompatible can be placed in the same paradigm because of their political stance. It will be demonstrated below that this is what happened with Burns and Stalker’s, and other contingency theories, which were placed in the functionalist largely ‘objectivist’ paradigm, where the textbook representations rightfully belong, but where in important respects it is highly arguable that Burns and Stalker’s approach in fact belongs.

It can be argued that objectivism fits well with the representations of Burns and Stalker’s book, but much less well with Burns and Stalker’s ideas themselves. Burrell and Morgan at one point agree with this view. They point out that much research based on such interpretations of contingency theories ignored process at the expense of structure and consisted of an abstracted form of empiricism:

“a swing towards a highly objectified and static view of social reality - towards a positivism of an extreme, narrowly empirical and, indeed, atheoretical form …. [which] carried with it a relatively determinist view with regard to human nature.”
(Burrell & Morgan 1979:54 - 57)

Yet, notwithstanding their own criticisms of these representations Burrell and Morgan themselves placed Burns and Stalker and other contingency theorists firmly within the functionalist paradigm. Two reasons for this present themselves. One, that despite their criticisms of representations of contingency theories for their objectification of these ideas to narrow, structural models with a deterministic view of humans, they themselves fell into the same trap:

“Burns and Stalker (1961) had demonstrated that successful firms adopted an approach …. consistent with demands placed upon them by their environment”
(Burrell & Morgan 1979:166)

They too focussed on Burns and Stalker’s model of organisation structures:

“The distinction offered by Burns and Stalker (1961) between mechanistic (bureaucratic) and organic systems has become well established” (Burrell & Morgan 1979:175)

The second reason is to do with Burrell and Morgan’s axis mentioned above, with its division between regulatory and radical approaches, which they called the ‘order-conflict’ axis (Burrell & Morgan 1979:x). Burns and Stalker’s work could fairly be placed on the order or regulation side of this debate, and it seems likely that for this reason the other factors making their theory such unlikely bedfellows with objectification, abstract empiricism and human determinism were overridden. Put another way, an essentially political stance took priority over serious ontological and epistemological differences.
Willmott, for other reasons, has also questioned the rigidity of Burrell and Morgan’s paradigm boundaries as determined by the radical/regulatory dimension (Willmott 1993). The interpretive paradigm as defined by Burrell and Morgan seems a more appropriate location for Burns and Stalker’s work. It is to do with ‘subjectivist’ approaches and theorists within this paradigm see reality and seek explanation of the social world through

“the realm of individual consciousness and subjectivity, within the frame of reference of the participant as opposed to the observer of the action.” (Burrell & Morgan 1979:28)

Burns and Stalker were by means at the extreme of the paradigm boundary for the subjectivist approach. They were by no means solipsistic and in no way denied the possibility of an external reality. Their position was perhaps closest to Weber’s who was placed across Burrell and Morgan’s boundaries of the functionalist and interpretive paradigms. According to Burrell and Morgan Weber was an objectivist in the sense that he believed in the objective reality of the social world and wanted to arrive at causal explanations of social events (Burrell & Morgan 1979:230). However where he departed from functionalism, in line, it is here argued, with Burns and Stalker’s approach, is that Weber aimed to arrive at these causal explanations through understanding the subjective meanings human actors gave to their situations and their enactments in those situations (ibid).

These variations in theorists’ work highlight some of the difficulties Burrell and Morgan faced in constructing their paradigm boundaries. However, if the second axis of Burrell and Morgan’s model - subjectivist/objectivist - is upheld, one must conclude that subjectivist and objectivist approaches cannot be encompassed within the same paradigm. This still leaves the problem of where to place Burns and Stalker, who from this brief exposition appear to straddle both paradigms.

Their ontologies appear to have objectivist (belief in an objective social reality) and subjectivist (that this social reality is influenced, if not determined, by human agency). Epistemologically Burns and Stalker can be categorised as subjective in that they believed organisation processes, structures and outcomes were in the hands of human actors at different levels in the organisation, and that to understand and have knowledge of these phenomena one needed to understand the participants’ individual consciousnesses, subjectivities and actions. Thus in terms of their ontology (in part); their epistemology and, as will be argued, their methodology, Burns and Stalker can be shown to fit squarely into the subjectivist, interpretive camp. What can be shown without any conditionals is the position of the mainstream representations of their work. These fit unquestioningly into the functionalist paradigm, and into its extreme objectivist spectrum at that.

Management accounting research using Burns and Stalker

Methodological points of similarity and difference between Burns and Stalker’s research techniques and other applications of their theory is best discussed through looking at management accounting research. It is presumed that the only research textbook writers were engaged with was representing (in summary) original texts. Looking at research by other scholars using Burns and Stalker’s ideas makes for a fuller comparison as one can examine methodology as well as ontology and
epistemology. Burns and Stalker’s contingency theory has been used extensively in management accounting research for the best part of the twentieth century and into this century. Management accounting researchers have used it primarily for the influence of factors such as environment and technology on control and decision-making processes. They have adapted these ideas to questions around design of information and control systems, budgeting and strategic planning (Covaleski & Dirsmith 1996).

One article from Accounting, Organizations and Society will be used for the purpose of comparison. This journal is mainstream in the interface between management accounting and organisation/management studies. The article is by Robert Simons (1987), an important scholar in this area, whose work is among those regarded as

“important research efforts which mobilized contingency principles in the examination of the use of managerial accounting systems and information in a strategic manner”. (Covaleski & Dirsmith 1996:)(original emphasis)

Simons set out to examine the relationship between control systems and the type of strategic situation the firm found itself in. The control systems, Simons is careful to point out were

“formalized procedures and systems that use information to maintain or alter patterns in organizational activity.” (Simons 1987:359) (original emphasis)

He used Miles and Snow’s 1978 typology of different types of strategy practised by companies, ranging from those in fairly stable situations (defenders), to those adopting more aggressive, innovative policies (prospectors) (Simons 1987:359). Simons hypothesised that there would be correlations between type of control system and type of strategy. Defender strategies would pursue formal accounting procedures, while firms adopting prospector strategies would have more flexible systems allowing for individual creativity (Simons 1987:360). This hypothesis was in line with a contingency approach and was designed, as was previous research, to test Burns and Stalker’s (1961) theory that

“unstructured, organic organizations were best suited to a strategy of innovation” (Simons 1987:357)

Thus far, Simons’ approach is similar to that of the textbook writers: what was considered to be ontologically real and epistemologically important were formalised structures and systems - in this case accounting control systems, and their relationships with organisation strategies in different contingent situations. Reality is seen as static; process is ignored as is the influence of human agency on control systems.

Simons’ research methodology supports the argument that his is a functionalist approach on its abstract, objectivist boundary. His research was painstaking in ensuring his sample selection of external experts and company executives. The design of his questionnaire was carefully tested with senior managers in randomly selected firms. Simons used overlapping data from respondents within the industry generally and from the senior managers from the randomly selected firms to arrive at a double confirmation of the categorisation of the companies’ strategies into prospector and defender.
senior managers who did not agree with the categorisation of their own strategies by more than two thirds of the other respondents had their firm dropped from the survey.

The questionnaire, which consisted of ten Likert-type scale questions for control system factors, was then subjected to a detailed statistical analysis, using supporting arguments by authors in the literature such as Gordon and Miller (1976), Govindarajan (1984) and Govindarajan and Gupta (1985) (Simons 1987:368). This is a carefully thought through and executed piece of research, and Simons is regarded, as seen above, as an important writer in this area.

Simons was intent on finding out about control systems through interviewing and surveying senior managers. The assumption behind this is that such managers had full knowledge as to what was happening in their organisation systems and that the employees at levels lower down would implement the managerial control systems as they were intended. Here Burrell and Morgan’s (1979) ‘human nature’ dimension also fits in with the objectivist stance, which is determinist rather than voluntarist. Organisation systems were regarded as ontologically and epistemologically important in testing Burns and Stalker’s theory, while the latter’s other concerns - those regarding the capability of the MD; the career, sectional and political interests of employees at all levels; the degree of integration of the new cadre of technical experts and the difficulties of moving away from bureaucratic habits and ways of thinking (see above) were not considered at all. Simón’s type of research fits in with Burrell and Morgan’s (1979) description of the extreme objectivist position in the functionalist paradigm as

“a swing towards a highly objectified and static view of social reality - towards a positivism of an extreme, narrowly empirical and, indeed, atheoretical form …. [which] carried with it a relatively determinist view with regard to human nature.”

(Burrell & Morgan 1979:54 - 57)

When one compares Simon’s research with that of Burns and Stalker’s, there is a strong argument to be made for them being substantially different because of their different methodologies as well as their ontological and epistemological premises. Burns and Stalker’s research was based on interviews, meetings, ‘in casual remarks or in lengthy expositions and revelations conveyed during mealtime or evening conversations’, and through observation of everyday routines in offices, laboratories and workshops. According to Burns this was all information about actions and happenings according to people’s commitments, and about systematic relationships between people and events explicable in terms of organisational, political and career significance (Burns 1966:xv).

Moreover Burns denied the existence of ontologically distinct categories. Rather, there was ambiguity with regard to the actions, events and personalities, inter-linked with organisations as political systems, status hierarchies and platforms for co-operation, conflict and careerism. It is here that Burns made his strong plea that in order to understand changes, developments and historical processes, the social (and organisational) world should be seen as a dynamic process, rather than as ‘an anatomy frozen into “structured immobility”’ (Burns 1966:xvi).

Interestingly, many of these points were made by Otley (1980) in a seminal article on management accounting research. In particular, he criticised the way the contingent variables frequently selected - organisation structure, management style and
environment - were used in the research. He wrote an extensive article in *Accounting, Organizations and Society* where he gave a critique of research to date. Some of his criticisms were close to Burns’ observations that the type of knowledge to be had was ambiguous – in terms of actions, events, organisational systems and the relations between them in a social environment (Burns 1966:xv-xvi).

From a very different perspective Otley made similar points, and highlighted them as problems with the management accounting research done. The first was that of vagueness: there were no practical guidelines as to how to order a relationship between management accounting systems and organisation structures of organisations; worse perhaps was the lack of clarity regarding links between specific contingencies, management accounting systems and organisational effectiveness; contingency variables were themselves ill-defined as was organisational effectiveness, and accounting systems’ effectiveness was not measured. The same contingent variables were likely to affect both organisation structure and accounting information systems, so organisation structure could not be used as the sole intervening variable between accounting information systems and contingent variables, as this would result in a circular argument (1980:416-9).

There was insufficient rigour, he continued, regarding the claims about management accounting information systems constituting the controls in organisations. They were only one among other organisational controls and should be studied in the wider context of the other controls also. Here Otley again echoed some of the concerns raised in the original text by Burns and Stalker: other factors were also potential contributors to organisational effectiveness - managerial flair and inter-organisational relations, for instance. Potential problems such as possible antagonistic power structures in the organisation also needed to be examined (Otley 1980:420-421).

Otley argued that statistical techniques based on large-scale surveys could not produce an in-depth analysis of, for instance, the complex interaction between different control mechanisms and accounting information systems. What was needed were longitudinal studies to show a relationship over time; exploratory, diachronic studies using something like an ethnographic approach on a limited number of organisations to establish what were the major variables and how they related to all organisational controls. And there had to be more reflexivity between the researcher and those being studied (Otley, 1980:413-426).

In sum Otley’s evaluation was damning: ‘environment’ and ‘technology’ were reified with no clear definitions; organisation structure and processes were similarly not defined clearly; contingency theories were largely unproven and research methods based mainly on large-scale questionnaires were ‘inadequate’ (1980:419).

What is interesting, is that Otley’s observations appear to have had surprisingly little effect on subsequent management accounting research - even in the same journal, *Accounting, Organizations and Society*. Research in the main was continued in the same way. Some concessions, it is true, were made. Nouri and Parker, for example, supported Otley’s comments on the lack of clarity regarding the connections between management accounting systems and different variables such as organisation structure and effectiveness. They pointed to the difficulties in establishing clear evidence for a connection between budget participation and job
performance. Some writers took the step of examining intervening variables instead - such as motivation (Brownell and McInnes 1986); role ambiguity (Chenhall and Brownell 1988); job-related information (Kren 1992) and budget participation / organisational commitment (Nouri and Parker 1998).

Much research however, continued to limit itself to issues such as strategy, structure and control systems. Chenhall and Langfield Smith (1998) for example looked at company strategy, organic versus mechanistic management and accounting practices. Van der Stede (2000) considered strategy, controls including budgetary controls and benefits. Davila (2000) looked at various types of information (customer, time, cost, resources, profitability) and product design and development.

Thus there continued to be articles critical of research methodologies and those same research methodologies continuing more or less unchanged in the same journal. More incongruous was an absence, to the authors’ knowledge, of any engagement with Otley’s ideas and any defence of the research practices he criticised.

There are thus two epistemological issues of interest: the different representations of Burns and Stalker’s contingency theory; and the apparent disregard of what one might consider to be valid and useful comments on management accounting research which was based on contingency theory.

Conclusion

The original project of this paper, the proposition that the textbook representations of Burns and Stalker, and the applications of Burns and Stalker’s research in mainstream management accounting research are substantially different in terms of their ontological positions, epistemological criteria and methodological approaches, should now stand.

It can be demonstrated that Kuhn’s ‘entities’ and those that do not exist are different in these two sets of texts. For the textbook writers and also largely for management accounting researchers, the entities that exist are those to do with organisation systems and their relationships to external contingencies. While these also existed for Burns and Stalker, the playing out of these relationships was determined by a range of other factors largely ignored in the first sets of texts.

Similarly, Kuhn’s stipulation that discrete paradigms had their own legitimate problems and admissible solutions, also points to differences in these texts. What was seen as problematic in the textbooks was the fit between organisation structure and external contingency, and thus the solution would be for managers to get this right. For Simons, and presumably other management accounting researchers, what was of interest was to see whether the theory ‘fitted’ – whether organisations in stable situations had ‘mechanistic’ systems; and those in more volatile conditions demonstrated more organic characteristics. People and their potential influence on these systems, which was the major problem presented by Burns and Stalker, and largely what their book was about, was ignored as a problem and therefore not addressed.
Kuhn’s different world that scientists would be working in in a new paradigm is analogous to Burns and Stalker’s different world from past conceptions of how organisations worked. Classical management theories were concerned with management, its control and procedures; scientific management with job design; and human relations and motivation theories largely with strategies that managers should adopt with the assumption of homogeneous reactions by subjects without much free will or diverse interest. As well as introducing new data to solve recognised problems, Burns and Stalker were interpreting both the old and new data differently and ‘placing them in a new system of relations - placing them in a new systems of relations with one another by giving them a different framework’ (Kuhn1970:85). No longer did they look at organisation structures or management policies outside the context of how these would be understood and acted upon by people who had various political and career interests to consider, and who belonged to a multiplicity of informal groups which had their own several sectional interests.

If the argument is accepted that Burns and Stalker’s work fits more properly into the interpretive paradigm as constructed by Burrell and Morgan, and that the textbook representations and management accounting research fit squarely into the extreme objectivist part of the functionalist paradigm, this strengthens the argument that they are substantively in different paradigms. This then opens up the question mentioned in the introduction of the unquestioned validity of these representations and research applications, which in turn opens up epistemological questions as to what counts as knowledge - first in the academy and then more widely.

As hinted at earlier, it is possible that these questions can arise, as presumably they do not or do to a far lesser extent in the natural sciences, is because of Kuhn’s argument about the incommensurability of paradigms in the natural sciences. Once a new approach can answer existing problems and is able to provide solutions where the existing paradigm is unable to, the new set of ideas or paradigm, not necessarily without a struggle from the old guard, replaces the previous one, which then is no longer regarded as providing valid knowledge.

As we know, it is different in the social sciences. Different conceptions of the world, of what counts as knowledge and how to increase this knowledge co-exist, often without communication or debate between them. This perhaps explains the fact that two very different types of knowledge can be derived from one text with very little argument. Kuhn, it is true, mentioned that there were also many discrepancies in textbook representations of the natural sciences. They wrote out of their texts the struggles between different theories and the sometimes contingent success of one theory over others. They usually presented the history of science as a linear, pre-determined, non-controversial history (Kuhn 1970). However the extreme differences, and substantial omissions in the representations and applications of The Management of Innovation have more far-reaching epistemological (and political) consequences for what counts as knowledge in the organisation and management area, and for how managers and consultants plan and execute their strategies.
References


Alvesson M & Skoldberg K 2000 Reflexive Methodology: New Vistas for Qualitative Research London Sage


Brownell & McInnes (1986)


Burke S 1998 The Death and Return of the Author: Criticism and Subjectivity in Barthes, Foucault and Derrida Edinburgh Edinburgh University Press

Burrell G & Morgan G 1979 Sociological Paradigms and Organisational Analysis: Elements of the Sociology of Corporate Life Aldershot Ashgate

Chenhall & Brownell 1988

Chenhall R H & Langfield-Smith K 1998 The relationship between strategic priorities, management techniques and management accounting: an empirical investigation, using a systems approach Accounting, Organizations and Society, 23 (3) 243-264


Daft R L 2001 Organization Theory and Design 7th edition Cincinatti Ohio South-Western College Publishing

Davila T 2000 An empirical study on the drivers of management control systems design in new product development Accounting Organizations and Society 25 (4) 383-409


Green M 2005 *Are texts produced by authors or by readers? Representations of a contingency theory in the organisation and management studies literature* Philosophy of Management formerly Reason in Practice 5 (1) pp85-96

Green M *Analysis of a text and its representations: univocal truth or a situation of undecidability?* Philosophy of Management formerly Reason in Practice forthcoming

Green M *Can deconstructing paradigms be used as a method for deconstructing texts?* Philosophy of Management 2007 Fourth International Conference, St. Annes’s College, Oxford, 8-11 July 2007

Kren 1992


Lawrence P R & Lorsch J W 1967a *Differentiation and Integration in Complex Organizations* Administrative Science Quarterly 12 (1) June pp 1-47

Lawrence P R & Lorsch J W 1967b *Organization and the Environment: Managing Differentiation and Integration* Boston Harvard University


Oswick C, Keenoy T W & Grant D 2000 *Discourse, organizations and organizing: Concepts, objects and subjects* Human Relations 53 (9) pp1115-1122


Pugh D S, Hickson D J & Hinings C R 1964 *Writers on Organizations: An Introduction* London Hutchinson

Robbins S P 2003 *Organisational Behavior* 10th edition New Jersey Pearson Education


Willmott H 1993 Breaking the Paradigm Mentality *Organization Studies* 14 (5) pp 681-719