

IN
INFORMATION SYSTEMS REVIEW

Volume 1, 2000

THE PARADIGM DEBATE IN INFORMATION SYSTEMS
RESEARCH

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ABSTRACT

The current debate over the 'identity crisis' in the field of information systems has led to increasing calls from a number of researchers for the development of a common 'intellectual core' and common set of related methodologies. Currently the consensus seems to be that researchers in the field of information systems typically adhere to one or another broad schools of thought. There is debate as to the extent to which there can be communication or commensurability between the work of those in the different schools. Researchers arguing for the strong incommensurability thesis in information systems research hold the view that inherent differences in ontologies and epistemologies reflected, for example, in the claim of the incompatibility of quantitative and qualitative research methods within the same research design, make commensurability between work informed by the different paradigms impossible. The call seems to be made by a number of researchers for 'harmony and convergence' around a single paradigm out of pragmatic considerations because by doing this the field will become stronger. These arguments are made largely on the basis of the early work of Thomas Kuhn reflected in the work of Burrell and Morgan. This paper will attempt to trace the emergence of this debate from

the breakdown in the consensual functionalist approach to information systems which dominated research in the 1970's and early 1980's through the paradigm framework of Burrell and Morgan in the 1980's and early 1990's through to the present polemic over the hegemonic influence of discrete paradigm based approaches, review the principal arguments for and against paradigm commensurability encountered in information systems research, and consider their implications in relation to the calls for methodological pluralism in research design.

INTRODUCTION: HOMOGENITY OR HETEROGENITY IN INFORMATION SYSTEMS RESEARCH?

The theoretical position in IS research is one, as Visala [1] and Checkland and Holwell [2] most eloquently point out, of fragmentation and unco-ordination. The field is divided into a number of different schools and trends. In common with those in the field of organisational studies, these schools often perceive themselves as based upon opposing theoretical precepts. A parallel can be drawn with the field of organisational theory where there are:

'... discontinuities in basic philosophical assumptions. problem focus and conceptual frameworks are seen to generate deep-seated fissures in the intellectual fabric of organisation theory. The latter tends to be viewed as a highly fragmented field of study lacking any overarching intellectual coherence or sense of historical direction.' [3:36]

The communication between the different schools has been described, mainly, as based on an aggressive refutation of each other's theories [4]. Reed, memorably describes these as warring camps of paradigm warriors intent on emasculating, if not destroying, the accumulated intellectual resources and powers of opposing factions.' [3:37]

This has been identified by a number of IS researchers as a fundamental weakness in the field of IS research and one which will challenge its ability to survive as a distinct discipline. This belief has most recently been articulated by Adam and Fitzgerald [5], who, although not arguing for a single paradigmatic position in IS, have argued that:

'There is also a very real risk that, unless the IS field can move towards becoming a stable and distinct discipline with its own intellectual core and accepted research protocols, traditional IS

research issues may be 'reclaimed' by other disciplines who regard these areas as more properly their remit.' [5:17]

There has been much debate on the philosophical underpinnings of IS research and whether IS could or should be described as a discipline [6, 7, 8] and a number of attempts have been made to map the intellectual structures of the field [2]. Yet, in common with many other disciplines only a limited number of frameworks for mapping the intellectual structures of information systems research have been proposed. In the field of IS Burrell and Morgan's framework [9] has played, and continues to play, a critical role in determining and maintaining intra-disciplinary boundaries. Despite criticism of Burrell and Morgan's framework, and the proposal of alternatives such as that of Hirschheim, Klein and Lyytinen [10, 11, 12], the most commonly used framework used has been Burrell and Morgan's [13, 14, 15].

Burrell and Morgan categorise research in organisational and sociological studies into four discrete paradigms - functionalist, radical humanist, radical structuralist and interpretive. Although, the interpretation of this framework by researchers within the IS field seems to be far from Burrell and Morgan's initial conception, the general framework has, in the IS field, become the accepted orthodoxy. Researchers now tend to place themselves within a paradigm explicitly (or implicitly) accepting the underlying assumptions of this framework. Research into IS traditionally has tended to fall into the 'functionalist' paradigm. Despite the calls for a broadening of the theoretical basis of the subject the situation has not changed substantially.

Thus the framework through a process of reification, is now a 'reality'. Closure comes not only from the intended ideological stance but also by 'playing the game' inherently accepting Burrell and Morgan's terminology, interpretations of philosophical concepts and language. In this sense

the researcher falls into a bounded paradigm almost by accident rather than by design. The acceptance of this framework negates any possibility of meta-theoretical innovation. Burrell and Morgan state for example that their four paradigms are based upon:

'...mutually exclusive views of the social world. Each stands in its own right and generates its own distinctive analyses of social life. With regard to the study of organisations, for example, each paradigm generates theories and perspectives which are in fundamental opposition to those generated in other paradigms.' [9: viii]

They argue that not only are the paradigms incommensurable at a basic philosophical level but that this means that any attempt to combine methods across paradigms is invalid: 'A synthesis is not possible, since in their pure forms they are contradictory, being based on at least one set of opposing meta theoretical assumptions' [9:25]. Each paradigm has different ontological, methodological, and epistemological foundations, and embodies divergent views of human nature. It is this belief in incommensurability, either explicit or more often implicit and assumed, which has formed the critical argument against any form of synthesis, integration or unity between any aspect of the paradigms.

Burrell and Morgan's position was to a great extent based upon their interpretation of Kuhn [16, 17, 18]. According to Kuhn's early work, the existence of conflicting schools is a symptom of the pre-paradigmatic stage of a science. Conversely the presence of a theoretical consensus over a paradigm for a field of study is taken by Kuhn as a sign that it has reached the stage of a mature science. Roth [19] makes the point that, many social scientists have taken the fact that there is no dominant paradigm in the social sciences as a reason why there is no normal science in the social sciences and therefore a lack of revolutionary breakthroughs. As social scientists have striven to achieve a consensus in order to move their field from a pre-paradigmatic stage they have thus taken a unitary stance on methodology.

A further implication, following from their interpretation of Kuhn's work is that a paradigm change is also taken as only occurring in a revolutionary, not evolutionary, way. This also negates the ability of the researcher to work between paradigms or incrementally move towards another paradigm. Despite the recent argument advanced by Burrell [20] that they used the revised, and more open, Kuhnian concept of paradigm within Sociological Paradigms and Organisational Analysis, they ignore the implications of Kuhn's later work, which can be used as a basis for contingent methodological pluralism. In short the incommensurability thesis combined with selective reading of Kuhn's concept of a paradigm provides a tool for creating and maintaining barriers within the discipline [21].

Not only do Burrell and Morgan oppose pluralism from a theoretical and practical viewpoint but also they oppose it from an ideological viewpoint, stating:

'Contrary to the widely held belief that synthesis and mediation between paradigms is what is required, we argue that the real need is for paradigmatic closure. In order to avoid emasculation and incorporation within the functionalist problematic, the paradigms need to provide a basis for their self-preservation by developing on their own account.' [9:397-398]

Our concern is that in the IS field the paradigm debate, rather than allowing different positions to develop on their own terms, as Burrell and Morgan argue, is leading to segmentation without communication and the possibility of the hegemony of one position.

The 'paradigm debate' is an 'ideological' struggle, based on the belief that until the field has reached a heterogeneous methodological position it will not advance. As Morgan [22] points out -

'Paradigm diversity is most often interpreted as threat by those organisational scientists committed to well-established models and methods for understanding the generation of knowledge as A gradual, cumulative, well-ordered process.' [22:13]

The debate became a ideological struggle in a second sense, as Aldrich [23] points out -

'...all of the perspectives I have reviewed have achieved significant standing today because, at their core, they have groups of dedicated researchers working on empirical research to test hypotheses derived from the perspectives. They read one another's papers, hold conferences, and issue edited volumes collecting recent empirical work....In the process of constructing theory groups they have bounded themselves, and organisational boundaries can be extremely difficult to surmount. The groups work very hard at emphasising how they differ from one another, and investigators have a stake in stressing their incompatibilities.' [23:37]

It is perhaps ironic that this framework provides a coherent basis for the purist or supremacist functionalists [24] forcing others who perceived themselves as working within alternative paradigms to further segment themselves, isolate themselves and thus perpetuate and intensify the 'paradigm wars'.

INTER-PARADIGM COMMUNICATION AND INCOMMENSURABILITY

A key argument for incommensurability is that, because linguistic symbols take on different meaning across paradigms, there can be no possibility of direct translation from one paradigm to another, and, therefore, there can be no communication across. Thus many of the protagonists seem to talk 'past' each other rather than to each other. This lack of communication has been traditionally linked to the 'fact' of the mutually exclusive nature of the paradigms within which the different researchers work. The argument derives from Quine's [25] thesis of the indeterminacy of translation and the absence of a meta-language for such. This thesis has been used as the basis for an argument for methodological pluralism by Roth [19]. The argument being that the problem of incommensurability is one of translation - so that, in principle, it is not possible to assert that

opposing theories are incommensurable, because of the lack of any language independent way of demonstrating the possession of common schema or set of beliefs. This is linked to relativistic arguments in that the aim of the researcher is seen as being not to ascertain the one right answer but the best, most empirically adequate account that can be given at the time. Thus the choice of framework is dependent upon pragmatic not logical grounds. Aldrich points out

'... if one adopts a more pragmatic - dare one say 'post-modern'? - approach and asks simply, 'Do the three groups talk to each other?', the answer is 'Some of the time'. They even occasionally work on similar problems, though the similarity is often obscured by different descriptive vocabularies.' [23:37]

However as Mangham [26] states:

' Many of us are unable to talk to economists, psychologists, sociologists, philosophers or political scientists because we do not understand their languages...Few people contributing to or interested in organisational studies show fluency in the language of any discipline.' [26:36-37]

Yet the use of 'common sense language' is often put forward as an impediment to the development of 'primitive' state of IS as a 'discipline'. The creation of a common technical language, used with scholarly precision, has been identified by Checkland and Holwell [2:54] as a desirable characteristic which they argue would enable ideas to be expressed with greater clarity and help to stimulate better debate in the IS field. We would argue that the use of *non-technical* language is critical to the successful development of IS.

Hassard [27] argued that Wittgenstein's later work [28] (the *Philosophical Investigations*) provides an analytical basis for undermining the strong incommensurability thesis. Wittgenstein's notion of language games and, in particular, the distinction between technical and non-technical language games is used to undermine strong incommensurability theses and advance arguments for commensurability. Hassard argues that:

'...this reading of Wittgenstein argues that as our perceptual limitations are empirically established, the rules and convention of our 'meta-language in use' allow us to deal, not only with a present language-game, but also with a new language-game into which we may be trained. The emphasis is not on a sudden gestalt-switch which allows us to see the light, but rather...of established perceptual arrangements which facilitate a transfer of allegiance.' [27:86]

Emphasising the commonality of the non-technical language which underpins the technical language games, it is argued that the existence of the common non-technical language means that at some level there must be a degree of commensurability between theories described in the technical language which can be determined by reference to concepts and criteria from the non-technical language. Weaver and Gioia [29] also argue that:

'although there may be errors of comprehension and failures of communication... there is no reason to believe that such difficulties are endemic to theoretical, meta-theoretical and methodological debates.' [29:585]

In this respect communication is theoretically possible, practically undertaken, and, ideologically, not only critical for the development of the field but a prerequisite.

INCOMMENSURABILITY AND METHODOLOGICAL PLURALISM

The incommensurability thesis used in the IS field based on Burrell and Morgan can be seen as repressing innovation, synergy and the advancement of the field. Willmott [30] succinctly points out from the organisational studies field:

'In sum, sociological paradigms and organisation analysis provides a valuable heuristic device...However, by denying the presence (and the possibility!) of approaches that are neither exclusively 'subjective' nor 'objective', and which are not governed solely by the principles of 'regulation' nor by those of 'radical change', sociological paradigms exerts an inadvertently repressive force as it denies the very possibility of analysis that is much more sensitive to the

ambiguous and contradictory nature of social reality than is allowed by its own one-dimensional vision of the mutual exclusivity of paradigms.' [30:49]

A recent response to this has been calls for 'methodological pluralism' within the field of information systems and multi-paradigm research [31]. Earlier calls for commensurability were linked to the long standing debate on the use of both qualitative and quantitative research methodologies in a single research design, which has been spluttering in the social sciences since the idea was raised by Campbell and Fiske in 1956 [32]. This was linked to the paradigm debate and the thesis, suggested by Burrell and Morgan, that qualitative and quantitative research methods represent opposing dichotomies. As Galliers [33] and Ngwenyama [34] have noted the choice of qualitative or quantitative methodology was explicitly linked to the paradigm debate and the thesis has been eagerly drawn upon by the opposing sides of different camps. Although many IS researchers would now agree with the statement by Morrow that:

'...nothing about qualitative research, regardless of the form it takes, necessarily precludes the use of quantitative representations or non-qualitative formal methods. Ethnographers and historians can and do count things.'[35:207]

The issue of incommensurability is brought into focus in the IS arena in the debates over methodological pluralism. The concept of 'methodological pluralism' itself however has been interpreted by different IS researchers in different ways, with two main approaches being taken. The first approach, described as Situational or Eclectic/Contingent asserts that specific methods are appropriate for specific situations or research subjects and that there are a number of equally valid research methods. It can be seen as a call for methodological tolerance. Wildermuth, for example, states : 'The method to be applied in a particular study should be selected based on the research question being addressed.'[36:451]. Early 'methodological pluralists' took this approach and called for methodological pluralism as a position where the different research traditions were seen as equal but conceptually diametrically opposite. Indeed, Morgan [37] one year after Sociological

Paradigms was published called for methodological pluralism as a diversity of viewpoints rather than competing paradigms. Banville and Landry [38] from the information systems field point to the inappropriate monistic view of MIS and call for methodological pluralism as the acceptance of the legitimacy of other paradigms. Lee [39], who may be described as a leading supporter of methodological pluralism in the information systems field has similarly argued for an acceptance of the:

'..methodological legitimacy of the procedures of each approach, apart from the legitimacy of their integration and collaboration.' [39:343]

A second approach is that of the pragmatists who attempted to integrate qualitative and quantitative methods in a single study. Methodological pluralists in the information systems field have tended to fall within this 'category'. These researchers have tended to focus on the practical issues of pluralism rather than the theoretical issues, and have ignored to a great extent the contradictions of combining nomothetic and ideographic research tools. This has been undertaken both from a premeditated pragmatic stance but also from an unpremeditated methodologically pluralist approach. The most powerful criticism of this approach is that it has continued to maintain the validity of the existing conceptual framework of incompatible paradigms while attempting to combine aspects from across paradigms. Thus for example, Wildermuth from a premeditated methodologically pluralistic approach has argued that:

'Interpretative research can be combined effectively with positivistic research, in spite of the fact that the two approaches take very different views of the nature of reality and how one comes to know about or understand reality.'[36:466]

Gable [40] again from a pragmatic viewpoint based on the work of Lee calls for 'pluralism' of methodologies and demonstrates it practically through the integration of survey research and case study. Hirschheim argues:

'Methodological pluralism is one theme we can and should support regardless of our epistemological biases.' [41:36]

EPISTEMOLOGICAL ARGUMENTS FOR PLURALISM

Methodological pluralism is inherently contentious, which ever discipline it is applied in [42, 43]. O'Brien [44], for example, has argued for greater rigor rather than 'retreating into a comfortable methodological pluralism' in economics. In its most recent incarnation based upon post-modernistic philosophy, methodological pluralism stands as a direct attack upon the theoretical closure of the paradigms. It undermines the orthodox analysis based upon interpretations of Kuhn as promulgated through Burrell and Morgan's framework. As such it undermines the very basis upon which the 'paradigm wars' have been fought. It thus gains the opposition of, on one hand, both mainstream interpretive researchers [45] and radical [46] and mainstream 'functionalist' researchers [47, 48]

Strong epistemological arguments have been put forward to validate methodological pluralism. Livari [15] argues that, epistemological assumptions have been understood as the nature of Scientific Knowledge about the phenomena to be investigated. Watson [49] distinguishes four types of epistemological basis for pluralism: {1} perspectival pluralism, resulting from differences in the perspective of the knower, {2} pluralism of hypotheses, resulting from different hypotheses about the one reality, {3} methodological pluralism, resulting from different formulations of a truth that transcends them, and {4} archic pluralism, resulting from the different principles by which philosophies may be constituted.

A number of researchers in the IS field have developed epistemological positions which are based on perspectival pluralism arguing from an interpretive viewpoint that each individual's perceptions

dictate the way in which they perceive the one external reality. As Checkland states ‘...we perceive the world through a filter of - or using the framework of - the ideas internal to us; but that the source of many (most?) of those ideas is the world outside’ [50:20]. This view has been articulated by a number of different researchers in the information systems field, but in each case, it has led to a unitary methodological stance. Pettigrew’s research is perhaps the exception to this rule. Pettigrew has pioneered the use of multiple methods across paradigms both in his early and later work [51]. He used a combination of longitudinal participant and direct observation, interviews using multiple interviewers across levels of hierarchy within an organisation, questionnaires, content analysis of internal documents and historical analysis as early as 1973.

Weaver and Gioia [29] similarly argue that communication between paradigms is possible because each paradigm constitutes a legitimate part of a larger scheme. This position is based on Giddens structuration theory [52] which they argue offers a solution to the problems of the irreconcilable nature of paradigms and therefore of qualitative and quantitative methodologies. Structuration theory has also been used by Weaver and Gioia as a way of resolving the problem over the irreconcilable nature of paradigms and therefore of qualitative and quantitative methodologies. They suggest that this meta-theoretical perspective provides a position from which researchers can invoke different assumptions, pursue different goals, ask different research questions, use different approaches but be involved in research with commonalities despite such diversities.

The epistemological debate has turned from polemic over the relative merits of the different methods, and there appears currently to be a rapprochement, a reconciliation, perhaps out of exhaustion rather than philosophical belief. This has also led to the serious consideration of pluralistic approaches, by a number of researchers [53].

CONCLUSION

This paper has discussed the various theoretical and practical approaches to methodological pluralism in information systems research, and, in particular, the influence the framework of Burrell and Morgan has had on the direction of research in the information systems field. Burrell and Morgan advance arguments for paradigm closure or exclusivity which derive from Kuhn. Later writers have drawn directly on that framework and the ideas of Kuhn and other writers to either attack or buttress the claims and counter claims of paradigm exclusivity or methodological pluralism. However, it is accepted, not least by Kuhn himself, that his original deployment of the concept of a paradigm was deeply ambiguous. Masterman identified twenty one different senses in which Kuhn had employed the term which she classified into three broad senses – metaphysical, sociological and artefact/construct. Kuhn, responding to Masterman's critique, agreed that he had used the term in at least two different senses and that, philosophically, the latter sense was the more fundamental. The first of these meanings he referred to as the sociological sense, while the second, with its reference to exemplary past achievements, was equivalent to the sense of the artefact or construct concept of a paradigm as outlined by Masterman.

Kuhn re-formulated his original argument to distinguish between, on the one hand, the broad constellation of beliefs, values and techniques that were shared by the members of a scientific community, the disciplinary matrix, and on the other, to the concrete puzzle solutions, or exemplars, that are employed as model problem situations for that research community. It is the exemplar that Kuhn considered to be closest to his original concept of a paradigm, the primary philosophical sense, and the sense which was fundamental for paradigm based research and the development of normal science. Burrell and Morgan, however, invert this order, as the title of

their work indicates, and treat the broader sociological sense as primary. What this means, in effect, is that the reference to the technical philosophical debate on paradigm commensurability may, strictly speaking, be irrelevant to the debate in the information systems field which derives from the employment of the concept of a paradigm in the sociological sense. This gives the debate in the field a curious flavour as the references, and referents, vacillate between the technical philosophical and the sociological, as the ideas and writings of those philosophers who have contributed to or propounded ideas which have a bearing on the technical debate are cited in context of the sociological one.

The intractability of the paradigm debate in the information systems field then may stem not only from the mixture of similar but different discourses but also from the consistent reference from the sociological debate back to the technical philosophical one. In this sense the character of the debate in information systems research is not like that encountered in the history or philosophy of science but rather like that encountered in theological, or, more strikingly, scholastic discourse. The adoption of a particular tradition, position, stance or interpretation, concerning the nature of information systems research is buttressed by arguments from authority. In the scholastic tradition that authority would be sought for in the scriptures and the writings of the divines. In information systems research this is substituted by references to classic authors and works.

The apparently technical and philosophical character or tone of much of the debate diverts attention away from the irrelevance of most of it to the question in hand. This is not whether, Kuhn [17], Quine [25], Wittgenstein [28], Giddens [52], or whoever, were methodological pluralists but whether the information systems field is, could or should be. Put starkly Burrell and Morgan's work was sociologically not philosophically oriented and intended. The effect of firing the

sociological ordnance out of the philosophical cannon was probably not even consciously intended. However, by grounding the argument ultimately back in the technical philosophical discourse the sociological nature of the argument was disguised and in the resultant confusion this point was lost and the paradigm debate degenerated into an arid scholastic dispute based on a subtle but pervasive confusion of different academic genres and discourses. In this respect it is important that the paradigm debate in information systems research is recast and re-examined against its proper sociological backdrop if it is to be used to genuine effect in the determination of the future shape of the discipline rather than to shore up a superstructural scholasticism which detracts attention from examination of the real nature of its foundations and concerns.

It is perhaps natural that information systems researchers should take their reading of the notion of a paradigm from Burrell and Morgan rather than delving back into the philosophical debate concerning the nature and status of the concept. For it is the broad applicability of the concept for organising understanding of information systems research which is of interest to the IS community rather than the technical debate surrounding the concept. However this would be a mistake as Burrell and Morgan use the notion of a paradigm, and, in particular, the expression 'sociological paradigm', in a very different way to that of Kuhn. Hence, reference back to the technical philosophical debate on paradigms and the commensurability or incommensurability of paradigmatic research is at best irrelevant and at worst misleading. To understand the difference between Burrell and Morgan's use of the notion of a paradigm and the expression 'sociological paradigm' and that of Kuhn it is necessary to step back into the philosophical debate from which his concept of a paradigm emerged. That debate may be stated broadly as concerned with the nature of science and scientific progress.

In its contemporary form the debate can be traced back to the writings of the Vienna Circle. One of the main tenets of the group was the notion of the unity of science and the reducibility of the concepts of specific disciplines to an underlying single system of science. This goal was to be achieved by logical analysis, specifically, by the application of the verification principle. This was famously stated by Schlick [54] in the formulation 'The meaning of a proposition is in its method of verification'. This logical foundation differentiated their ideas both from the empiricism of Hume [55] and the positivism of Comte [56]. The logical positivists believed the application of the verification principle would simultaneously purge scientific discourse of metaphysical statements and reduce the remainder to a system of elementary empirically verifiable propositions.

Popper [57] had given a new twist to this debate when he argued that it should be falsifiability rather than verifiability which should be the test for a scientific statement. That is, how and under what conditions a scientific statement might be falsified. This seemed a stronger logical test than that of verification. The truth of the statement cannot be established by any amount of positive examples but its falsity can be established by the observation of one negative one. As a contribution to the internal logical positivist philosophical debate it was quite elegant. But Popper was making another, and larger claim, which was that this was, in fact, the way science proceeded. In this respect the philosophical and the historical and sociological debate concerning the progress of science were conflated.

Kuhn as a historian of science was quite convinced that this account of how science progressed was not correct. His target was Popper's suggestion of falsifiability as the driver of science. It was this that led Kuhn to introduce the notion of a paradigm and the related concept of a sociological paradigm. Kuhn argued that for the most part scientists are not concerned with falsifiability or

even with grand scientific problems but rather with working within pre-existing paradigms within which most scientific work might have the character of puzzle solving. Significantly, paradigm based science could proceed even in the case of apparently disconfirmatory observations. Kuhn's account offered a genuinely new way of understanding the progress of science and a new philosophical concept for doing so.

Burrell and Morgan's use of the expression 'sociological paradigm' does not however follow the logic of Kuhn's. Although they refer to Kuhn's work [9:35] they then explicitly state that they are using the term paradigm:

'...in a broader sense than that intended by Kuhn...we are arguing that that social theory can be conveniently understood in terms of the co-existence of four distinct and rival paradigms defined by very basic meta-theoretical assumptions in relation to the nature of science and society.' [9:36]

Their use of the expression 'sociological paradigm' is not merely broader than that of Kuhn but completely different. Burrell and Morgan's use of the expression is closer to that which would normally be equated with the expression 'school of thought'. In this sense the functionalist, interpretative radical humanist and radical structuralist paradigms are more like schools than that of sociological paradigms in Kuhn's sense of the term. Similarly, the debates between members of the different schools are more like those which characterise ideological or theological debates such as that in Umberto Eco's [58]work *The Name of the Rose*, between the representatives of the Benedictines and Franciscans. Their debate is not scientific, and its character is scholastic rather than paradigmatic.

Of course it is quite acceptable to use the expression in the way which Burrell and Morgan do to refer to rather broad sets of assumptions about the social science and society which they deploy.

What it is not acceptable is then to try and step back and relate this usage and their interpretation of the nature of IS research based on it, to the earlier technical philosophical debate. This applies particularly to the question of the commensurability or incommensurability of IS research. For the logical positivists, at some level, scientific discourse had to be commensurable because of their reductionist programme. For Kuhn paradigms, at some level, might have to be treated as incommensurable because of the different visions embodied in the different model problem solutions or scientific achievements. Burrell and Morgan set off from a completely different starting point from either and the philosophical debate has no real connection with it.

In this respect it is important that the paradigm debate in information systems research is recast and re-examined against its proper sociological backdrop. Important if it is to be used to genuine effect in the determination of the future shape of the discipline rather than to shore up a superstructural scholasticism which detracts attention from examination of the real nature of its foundations and concerns.

Not only do we believe that the paradigm debate in information systems research needs to be recast and re-examined against its proper sociological backdrop we would also agree with Van Maanen who argues that:

'in simple moral terms, the idea that we should somehow look toward paradigmatic consensus for our salvation is wrong. Even if such a world were possible...it would be a most uncomfortable place to reside. It would be a world with little emancipatory possibilities, a world with even tighter restrictions on who can be published, promoted, fired, celebrated, reviled than we have now.' [59:689]

Perhaps IS researchers should also accept the message that '...contemporary interpretations suggest that the grand narrative of scientific progress is in a state of terminal decay.' [3:37] and not look to the creation of a 'substantive ideology' in an attempt to forward scientific progress and thus some

form of recognition and legitimacy. The strength of the discipline is its heterogeneity. We would argue that the field of Information Systems occupies a ‘*space between disciplines*’ [60] rather than being a discipline proper. And that the field should acclimatise itself to this ‘ecological niche’ grounding itself on agility, on its roots in practice rather than on a set of canonical epistemological and methodological assumptions (and the concomitant intellectual priesthood). Indeed to draw upon *a more recent* argument put forward by Burrell, drawing on the work of Latour

‘...for a field of Science to be successful, an actor network tends to be developed, and whether the area does or does not develop to full fruition in practice depends upon hard work and political nous amongst its leading lights.’[20:643]

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ACKNOWLEDGEMENTS

The authors would like to acknowledge the detailed and constructive comments of Matthew Jones of Cambridge University, Martin Parker of Keele University and the editorial comments of Donal Flynn of UMIST.

An earlier draft of this paper was presented at the European Conference on Information Systems in 1997