Articles

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Strategy through a Cultural Lens
Learning from Managers' Experience

Abstract   *In the spirit of recent pleas for management research to engage with both the world of theory and the world of practice, this article reports on interactive work with managers which has sought to explore how their understanding of organization culture informs deliberations on strategy development and strategic change in their organizational settings and, in turn, informs our theoretical understanding of the links between organizational culture and management. The article provides case examples of such deliberations and discusses the implications for the concept of collective cognition, the significance of organizational routines and the management of strategic change.*

There has been a growing interest in the strategic management literature in explanations of strategy development and change, not in terms of a traditional pedagogic and normative orthodoxy of rational analytic planning, but rather in terms of cultural and cognitive explanations. It is a well enough established school of explanation compatible with notions of bounded rationality (March and Simon, 1958), enactment (Weick, 1979) and interpretative schemes (Bartunek, 1984). It has taken form in explanations of strategic issues in terms of cognition (Walsh, 1995) and at the industry and organizational level by reference to aspects of ideational culture variously referred to as recipes (Spender, 1989), paradigms (Pfeffer, 1981; Johnson, 1987) and dominant logic (Prahalad and Bettis, 1986). There is powerful evidence on the basis of longitudinal studies (Grinyer and Spender, 1979; Bartunek, 1984; Pettigrew, 1985; Johnson, 1987; Greenwood and Hinings, 1993) of the marked influence of the 'taken for grantedness' of management practice and its effect on patterns of strategy development.

   In terms of the way in which strategic issues are addressed in organizations, however, the problem is that the more rational approaches to strategic decision-making, so often found in normative models, are readily understood by managers and can be easily employed. So in dealing with strategic issues managers operate in two worlds: the first, the world of synthetic reason and logic; the second, a cultural and political world of management practice. While the models for the former are well rehearsed, explicit and readily available, with few exceptions the models for the second remain rather obscure, essentially conceptual and not easily accessible

for managers. This article reports on work with managers which utilizes one of the few models to build an explicit link between organizational culture and explanations of strategic management and decision-making. This is done for two purposes. The first is to explore with managers the extent to which such an understanding is useful and, in particular, the extent to which it provides them with concepts relevant to their reality. However, in the spirit of 'mode 2 research' (Gibbons et al., 1994; Tranfield and Starkey, 1998), the second is to 'theorize with managers' so as to gain insight into important areas of academic debate on the basis of their deliberations and experience.

The article begins by explaining the concept of the 'cultural web' in terms of underpinning concepts and theories which inform it. Second, it reports case observations from work undertaken with managers which has utilized this framework in the context of the development or critique of their organizations' strategy. The article concludes by drawing implications from these observations, informed by the managers themselves, and relating them to our understanding of the relationship between organizational culture and the concept of collective cognition, the significance of organizational routines and the management of strategic change.

The Theoretical Bases of the Cultural Web

Traditional notions of strategic management would have it that strategies are developed through an analytic/evaluative mechanism. It is a notion rooted in a scientific view of management with managers positioned essentially as cerebral planners. There is now enough evidence about the limitations of this model (Mintzberg and Waters, 1985; Mintzberg, 1994) and of its questionable benefits to organizational performance (Rhyne, 1986; McKiernan and Morris, 1993) to avoid the need for lengthy discussion of it. The explanations of the adherents of cognitive, cultural and institutional schools of thought fit more closely with observed patterns of strategy development.

Researchers taking a cognitive approach to management have demonstrated that strategic issues and agendas (Dutton and Jackson, 1987), competitive positioning (Porac et al., 1989; Reger, 1990; Reger and Huff, 1993; Daniels et al., 1994), biases in strategy formulation (Schwenk, 1984; Duhaime and Schwenk, 1985) and the nature of strategies followed (Ginsberg, 1989) can be explained in terms of the cognitions of managers. There is also evidence that there may exist core constructs of such cognitive structures which are held in common according to industry sectors (Spender, 1989; Reger and Huff, 1993; Porac et al., 1989). This bears similarity to those who have explained strategy development in terms of ideational culture, as a product of the taken-for-granted assumptions, or paradigm, held commonly within an organization (e.g. Schein, 1992; Johnson, 1988). Indeed psychologists have acknowledged the similarity: Silvester et al. (1999: 3) argue that 'shared attributions', by which they mean 'shared causal schema for important work related events', 'operate as a group level cognitive heuristic in much the same way as a cognitive framework operates for an individual'. Obvious similarities exist with Schein's definition of organization culture as a 'set of basic assumptions

shared by members of a group'. This suggests that while individuals may hold quite varying beliefs about many different aspects of their organizational world, there exists at some level this core set of assumptions without which the organization could not function—indeed would not be (Smircich, 1983); it would be no more than a collection of individuals. It also resembles the arguments put forward by institutional theorists that individuals are captured 'by a web of values, norms, rules, beliefs and taken for granted assumptions . . . [which] . . . define the way the world is and should be' (Barley and Tolbert, 1997: 93).

Those who have sought to understand such processes in the context of organizational activities (e.g. Ranson et al., 1980; Bartunek, 1984; Johnson, 1987; Greenwood and Hinings, 1993) also demonstrate that it is no easy matter to disassociate the assumptions peculiar to an organization, or sector, and the activities themselves. These sets of norms and assumptions are not isolated from day-to-day activity in organizations; rather they should be regarded as part of a 'complex interaction of interpersonal cognitive processes, power dependencies, and contextual constraints' (Ranson et al., 1980: 1) that are the fabric of organizational life and are mutually reinforcing. Indeed such core assumptions in organizations typically relate to the appropriateness of organizational activities, in line with the concept of interpretative schemes (Schutz, 1967; Ranson et al., 1980; Bartunek, 1984).

It is however useful to draw on a wider literature in order both to broaden and to be more specific about the range of organizational interdependencies that exist. In common with others who point to the link between ideational culture and cultural artefacts (Schein, 1992; Hatch, 1993), Johnson (1987, 1988, 1992) has argued that an organization's paradigm can usefully be thought of as embedded in a web of symbolic, political and structural aspects of organizations which help interpret and provide responses to conditions faced by the organization.

The *routine* ways in which members of the organization behave towards each other, carry out their work and interface with aspects of their environment are the 'regular and predictable behaviour patterns' (Nelson and Winter, 1982: 14) or the 'way we do things around here' (Deal and Kennedy, 1982), which form the day to day reality of those in the organization, preserve and order organizational knowledge (Jelinek, 1979) and 'occupy the crucial nexus between structure and action' (Pentland and Reuter, 1994: 484) in organizations. The importance of such routines is increasingly recognized by those who view the firm as an economic entity since they can constitute the basis of embedded competences rooted in the organization's heritage (Teece, 1985), potentially providing competitive advantage (Barney, 1986) and guiding collective action and strategic choice (Cohen et al., 1972; Hedberg et al., 1976).

Trice and Beyer (1984, 1985) have shown the extent to which *ritual* activity such as training programmes, selection, promotion and assessment procedures guide 'how one might behave in certain situations . . . [and] act as guidelines for interpreting and evaluating the actions of others' (Schultz, 1995: 85). Such rituals can signal what is seen as especially important in the organization. More formalized, apparently 'hard' *systems of control,* including management accounting systems, budgeting and planning activities and reward systems play a similar role by focusing attention and activity on what is seen to be important.

Other *symbolic aspects* of organizations such as logos, offices, cars and titles, the type of language and terminology used, or dress, become a short-hand representation of the nature of the organization or people's role within it (Johnson, 1990). Indeed Gagliardi (1992) argues that the physical symbols of organizations, such as architecture, influence the way in which organizational members make sense of events: 'It is the symbolic identification with organization or decisions, as much as real choice and participation, that produces commitment and action' (Pfeffer, 1981: 207). Martin (1982) and Wilkins (1983) have also shown that *stories* or myths act as 'vehicles of conception', providing 'cognitive short cuts' for organizational members. They are told by members of the organization to each other, to outsiders, to those who join, embedding current situations in experiences of the past (Schank and Abelson, 1977), flagging up important events and personalities and identifying mavericks who deviate from the norm.

Power is also likely to be associated with the key constructs of the paradigm and the routine and symbolic aspects of the organization; indeed, it is most effective when 'power holders have constituted and institutionalised their provinces of meaning in the very structuring of organisational interactions so that assumptions, interpretations, and relevances become the general interpretative frame, the cognitive map, of organizational members' (Ranson et al., 1980: 8). This association may well have been cemented by past success, further consolidating the position of power holders (Hickson et al., 1971) and perhaps embedding their deeds in heroic stories. Indeed Brown (1994) notes the extent to which symbolic action, more generally, is employed to achieve and cement influence and legitimacy in organizations. Power is not necessarily a matter of hierarchy. There might be parts of the organization with an affinity or special association with centrally important routines, knowledge or core assumptions which are powerful because of this; Mintzberg (1979) recognizes this in his descriptions of technocracies and professional bureaucracies, for example. In turn, the formal *organizational structures* are likely to reflect and preserve power structures; the way in which that structuring takes effect in, for example, mechanistic or organic styles of management, is likely to reflect the links between power and the routinized and symbolic architecture of the organization (House, 1991).

The 'cultural web' (see Figure 1) recognizes and represents the mutuality of organizational assumptions and political, structural, systemic, routine and symbolic artefacts related to the day to day action of organizations. As a model it also has useful properties as a diagnostic framework and has been used in this way in the research which is now reported.

Exploring Cultural Explanations of Strategy Development with Managers

Many of the characteristics of action research are evident in this project (Eden and Huxham, 1996; Elden and Chisholm, 1993; Greenwood et al., 1993). Undoubtedly the intent was to provide value to the client; but the approach to the work and in particular the use of the cultural web was informed by theory. One aim of the workshops was to provide a means by which learning from one could inform another and, in turn, inform the bases of theory upon which the web itself was

Figure 1   The cultural web of an organization
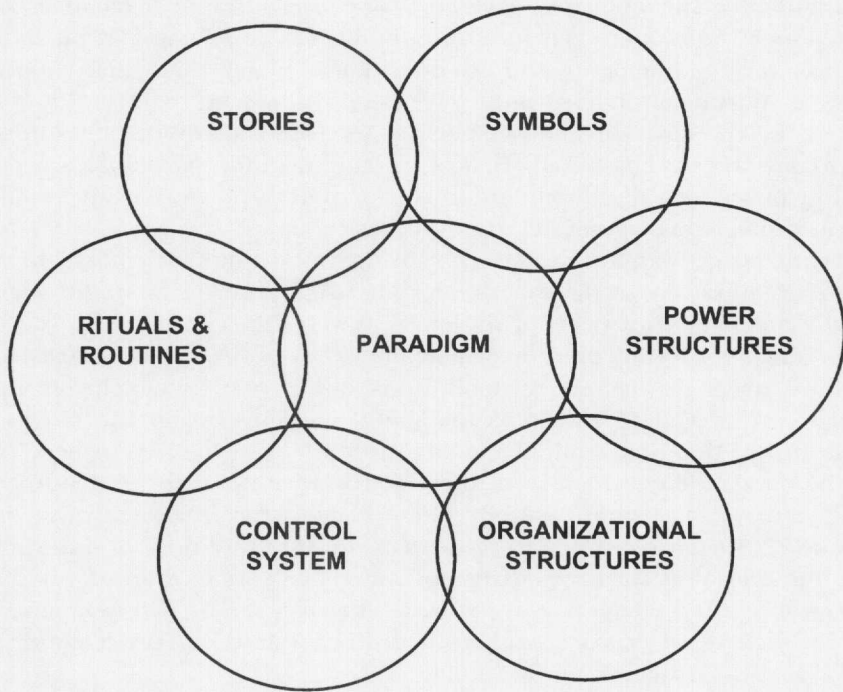
based. There was, then, an expectation that theory development, as informed by this work, would be emergent and incremental. There was also a recognition that history and context relating to the particular interventions were critical to interpretation.

The work on which this article is based set out to understand how a view of organizations and organizational strategy in terms of the cultural web has value and meaning to managers; and what such meaning signifies in terms of the practice of management. The research therefore sought to bridge a gap between theoretical perspective and practical relevance. Inevitably, to achieve this, it was necessary to explain the theory to managers, as encapsulated in the model of the cultural web, and this was done in 'workshops' which are described below. The research therefore included a learning process for the managers in common with other work in an action research tradition in the management field (e.g. Mitroff and Emshoff, 1979; Argyris et al., 1985; Grundy and Johnson, 1993).

Usually the activity was undertaken as part of a purpose-designed programme or workshop for managers of specific organizations, typically to consider problems of managing strategic change. Since the mid-1980s the author has conducted over 50 such workshops, each typically consisting of 5–15 managers. Some workshops were repeated within the same organizations; three organizations account for over 30 of the workshops undertaken. However, most workshops were undertaken between once and three times for a given organization.

The workshops followed a common sequence. They began with an explanation by the author of different ways of thinking about strategic management, including an explanation of the concepts covered above. Because the executives related readily to such ideas and accepted the model as a relevant explanation of organizational phenomena, it should be acknowledged that their subsequent observations and interpretations must have been influenced by this. However, the same would be the case for any perspective on management practice utilized in similar circumstances. The aim here was to legitimize for participants a cultural explanation of strategy development so as to explore and understand managers' insights on strategic management.

The second stage was an exercise requiring workshop participants to 'audit' their own organization using the dimensions in Figure 1. First the managers individually noted down aspects of the cultural web they considered to be typical of their organization. They then met in small groups of five or six to discuss these observations; these discussions normally took about one hour. The group produced their own version of the cultural web, including within the circles items that, as a group, they felt typified the organization; and, if they wished, placing outside the circles items which individuals felt were noteworthy, but upon which the group did not agree. The author did not take part in these considerations apart from clarifying concepts if requested; in the tradition of interpretative research, the emphasis was on seeking to understand organizational phenomena and processes as the managers perceive and interpret them (Van Maanen, 1979). Each group then reported back to the others using the web as a visual aid. Again, the author acted as observer, not as tutor.

The managers and author then discussed the significance of the webs in terms of the strategy and strategy development of their organizations. Throughout these presentations and discussions the author took notes. It was not possible to tape-record discussions given the sensitivity of some of the content and the practical difficulties associated with making sense of highly interactive discussion between participants from tapes after the event. The notes that were taken were primarily concerned with the themes of discussion, and interpretations and insights of managers. It is these notes that have been drawn upon for the purpose of this article.

The overall aim, then, was to construct a context of workshops within which: 'Discovery occurs in contexts where knowledge is developed for, and put to, use, while results—which would have been traditionally characterized as applied—fuel further theoretical advances.' (Gibbons et al., 1994: 19, quoted in Tranfield and Starkey, 1998: 347–8).

While the observations discussed below are informed by the large number of workshops held, it is not practical to report on all of these. Three have been selected to illustrate the sort of data produced by the participants. However, these are not chosen because they are typical of all workshops, but because they provide a useful context in which to consider the themes discussed in the paper. In the case of NHS trusts the article draws on two workshops attended by trust managers four years apart, one of which was attended by managers from different trusts and the other by managers from a single trust hospital. The case therefore provides the opportunity to explore similarities and dissimilarities by location and time. The second case, a chemicals business here called Metto, reports on a single workshop

event with senior executives of that organization, specifically concerned with problems of managing strategic change.

In each case a web is shown which includes material provided by participants, and summarizes the context and the discussion, though care has been taken to omit material which could identify the organizations concerned. This is followed by a review of three of the main themes arising from the discussion with managers in these workshops, which also draws on discussion in other workshops, so as to inform both theoretical and practical aspects of strategic management and strategic change.

Some observations about the workshop process are important for understanding and interpreting what follows. First, while considerable differences in the con-stituent elements of the webs occurred when individuals pooled their initial notes, a consensual view tended to emerge as members of a group sought to interpret the elements in terms of what they signified. This is discussed more fully below in the discussion on 'collective mind' (p. 415). Differences in interpretation or sig-nificance occurred most often under two conditions. First, where participants came from very different locations; for example, there were differences in NHS and Metto about symbols and stories which had localized meaning. Second, there were differences where participants were from very different levels of manage-ment. For example, in Metto, prior to the exercise reported here, the main board of the company had undertaken a similar exercise. They admitted to finding difficulty in specifying some of the aspects of the web, especially those associated with symbolic aspects of organizational culture. While they could identify these in relation to their own work environment—the boardroom, the executive suite, the stories they told each other and so on—they could not readily identify them as they related to other levels of management. This came as a surprise to them, not least because they recognized, through the exercise itself, that these were significant aspects of organizational culture, potentially linked to issues of strategic change.

It is also worth noting that this was an exercise that participants enjoyed. This could be because they were examining their own experience in a fairly novel way; it could also be because it legitimized discussion of some elements of that experience not frequently discussed or discussed more as 'bar conversation'. There was, then, a certain playfulness in the exercise which appealed to participants and bears out the observed importance of informality in raising and handling what could be problematic issues (Bartunek et al., 1992).

Case Examples

Case 1: Health Service Trusts

The web shown in Figure 2 was produced in 1995 by a group of six chief executives of newly formed National Health Service (NHS) trusts, organizations established to deliver health services as part of the restructuring of the NHS in the UK required by government legislation. The purpose of their meeting was to consider problems of managing change in the trusts. On this occasion they worked as a single group for a full day with discussion centred on the web for several

Figure 2   NHS trusts (1995)
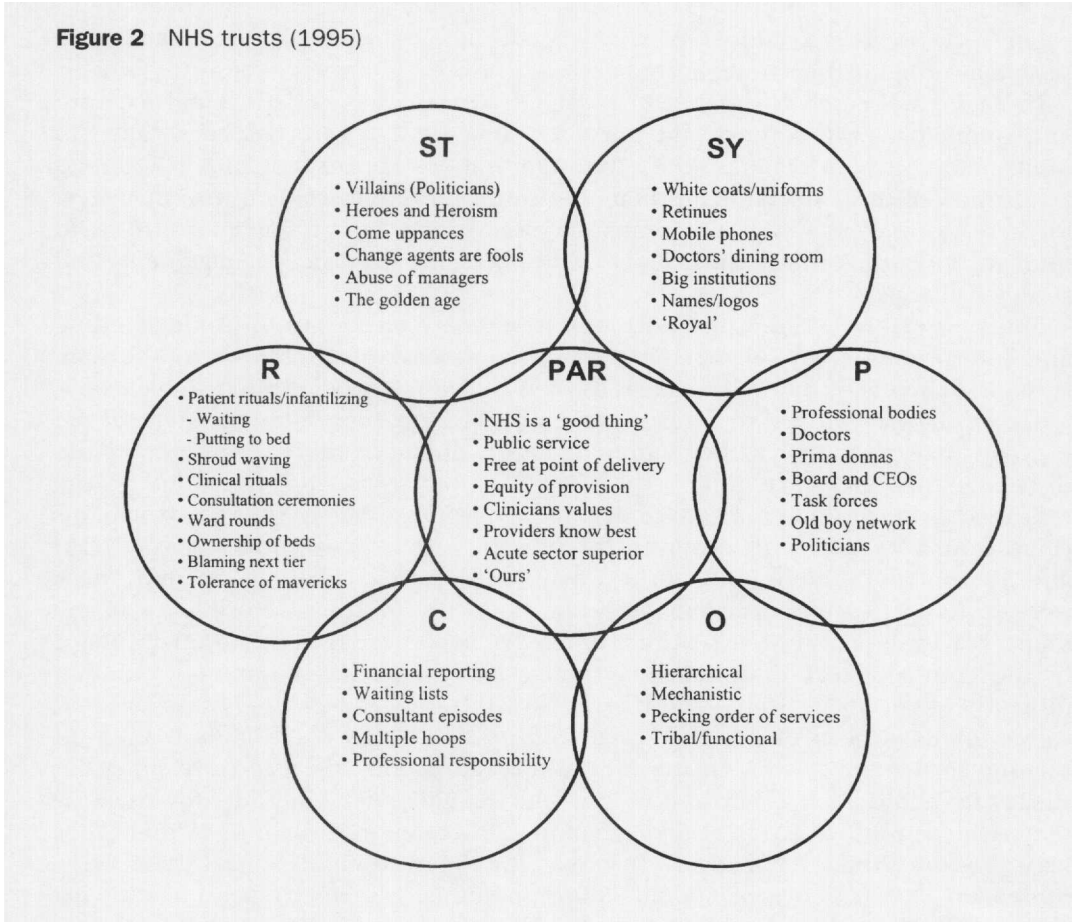
hours. The figure shows their consensus view after a good deal of debate on the significance of elements of the web relating to constraints on change, with an emphasis on the relative importance of structural or symbolic barriers to and means of managing change. This debate is reflected in the discussion later in this paper.

The assumptions within the paradigm reflect the common public perception in the UK that the NHS is a 'a good thing', a public service which should be provided equally to all, free of charge. However, it is medical values that are central, and those providing them who know best; this is rather different from an organization to serve the needs of those who are ill. Perhaps in line with this, the NHS is seen as 'belonging' to those who provide the services.

Much of this is reflected in the rituals and routines identified. At the core are rituals to do with what participants labelled 'infantilizing': making patients wait, putting them to bed, waking them up and so on. The subservience of patients is further emphasized by the elevation of clinicians with ritual consultation cere-monies, ward rounds and bed ownership underlining that it is the 'professionals' who are in control. Within this there is a good deal of 'buck passing' in the form of blaming the next tier of responsibility. Many of the rituals and routines are, then, about ensuring that each set of actors 'know their place'. They also have the

effect, at least for the clinicians, of formalizing relationships and thus distancing them from patients. As one participant put it: 'Much of this is to do with "patient coping".'

The stories and symbols of the organization are about the legitimacy of the system. Stories about villainous politicians trying to change the system; the 'come uppances' of those who try to make changes, with tales about the mistakes they make; heroic acts by those defending the system (often well known medical figures); and the abuse heaped on management who try to manage medical practice. And there were stories about the golden age of the NHS, now under threat. The symbols reflect the various institutions within the organization, with uniforms for clinical and nursing staff, distinct symbols for clinicians such as their staff retinues, and status symbols such as mobile telephones and dining rooms. The importance of size and status of physical buildings was reflected in the designation of 'Royal' in hospital names, seen as a means of ensuring that a hospital could withstand the threat of closure.

The NHS participants pointed to the fragmented nature of the power in the organization, with multiple power points each of which had its own symbolic distinctions. However, participants also emphasized the informal networking that took place through an 'old boys' network' which allowed the organization to come together, particularly under threat.

The structural and control aspects of the organization were formal: hierarchical, mechanistic structures with a clear pecking order of services within. There was a lot of reporting of a financial nature, but also in terms of monitoring, for example waiting lists and the time taken by consultants to see patients. However, underlying these formal sets of structuring were the less formal systems described in organizational terms as 'tribal', and in control terms related to the professional constraints and responsibilities in exercising control over individuals. Participants also pointed out that when it came to organization and control, formal systems were largely imposed upon them, as one participant put it, it is 'not what the NHS is all about; they are just the measures placed upon people'.

The overall picture is that of a system fragmented in its power bases and supporting symbolic artefacts, with a clear division between clinical aspects of the organization and management: indeed in which management is seen as relatively peripheral. As one executive put it: 'there is an arrogance of clinicians but it is a justifiable arrogance; after all it is they who deliver on the shop floor, not management'. This duality was reflected in other ways: formal structures and systems, with informal networks linked to professional standards and conduct; a fragmented power structure that came together under threat; and change agents seen as external and alien to the culture.

In 1999 a second group of NHS trust managers took part in a similar exercise. These were 12 executives of a single trust hospital in the UK. All of them were clinicians but with increasing managerial responsibilities. Here, then, we have a similarity of context, in that it is still the NHS, but a difference of context in terms of time and the fact that they were from a single organization. These participants worked in groups of four for about an hour to produce three cultural webs which they presented to each other. It is not practical here to reproduce all three. Figure 3 summarizes common themes that were evident from the three webs and shows differences (in brackets).

Figure 3   NHS hospital trust 1999
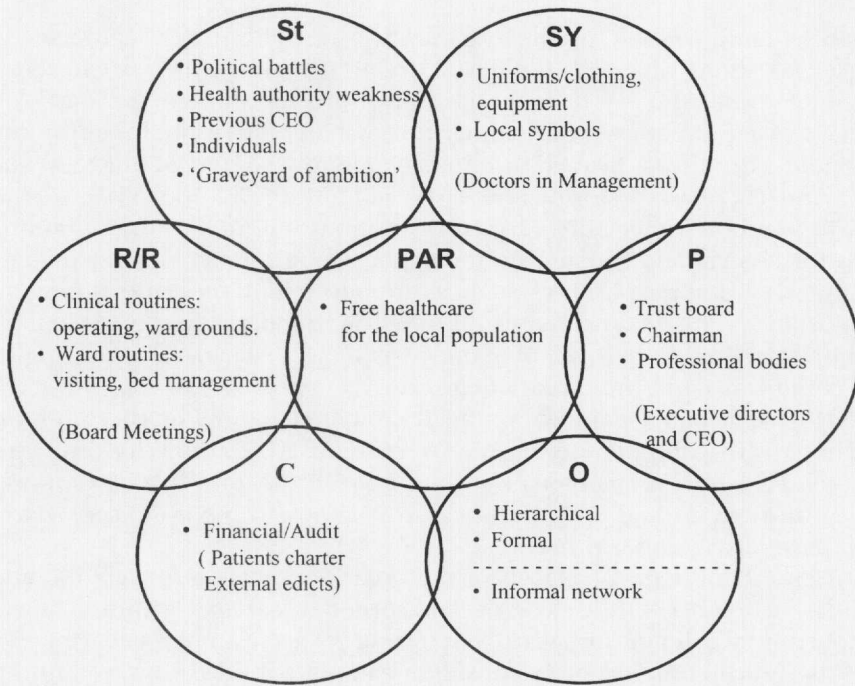
Again, the central assumption is to do with free healthcare for the local population. With regard to power and structure, the emphasis is on formality with regard to the trust board, its chairman and associated organizational structures, but also on the informality of the network within the hospital and the influence of professionals and professional bodies. There were different views on the extent to which executive directors had real power. It is the formal, internal control systems that are commonly emphasized, particularly in terms of the systems of financial control, contract and audit set up for trust management, with less agreement on the significance of externally imposed controls. The rituals and routines empha-sized are those associated with clinical activities and the management of hospital wards; just one group included top management meetings as a significant ritual.

Stories are about political battles within the hospital but also between the hospital and external bodies such as the health authority. There are stories about individuals such as the previous chief executive officer (CEO) and others who had exerted power in the past or who were regarded as 'characters' or mavericks; and a common story about this particular hospital as the 'graveyard of ambition' for doctors. There was common emphasis on highly localized symbols to do with the hospital, but also on symbols of healthcare, especially with regard to clothing, uniforms and equipment. One group saw themselves as doctors with management responsibilities as symbolic in itself of changes taking place in hospital manage-ment.

Case 2: Metto

Figure 4 is a cultural web which summarizes three drawn up by senior executives of a chemicals business. In this case the exercise concerned with the cultural web was part of a workshop with a wider agenda, to consider the strategic direction of the business as well as issues of strategic change. It was attended by the top 16 executives of the European division of the firm. The exercise using the cultural web took up the first afternoon of a two-day session. It is useful to consider here because the CEO of the business had specifically asked for the exercise to be undertaken as a means of making explicit problems of strategic change experienced by the division and of considering levers for strategic change. The case therefore allows us to consider the cultural web, not only as a means of describing organizational culture, but as a means of considering issues to do with managing organizational culture.

Historically Metto was a business that had grown by acquisition, in the main by manufacturing plants being added to broaden international scope. More recently it had in turn been acquired by a multinational group which had introduced managers into the top team, including the new CEO who had had previous exposure to the cultural web. A major review of the strategic direction of the business was underway at the time of these workshops.

It was clear to participants that the exercise was not merely descriptive. They worked in three groups of five or six. There was clearly a nervousness about presenting back finer-grained detail on the webs themselves, whereas even occasional visits to the rooms in which the groups were working pointed to much fuller anecdotal and illustrative discussion of aspects of the webs. This reluctance to surface detail did, eventually, become an issue in itself and is reported later (see p. 420). However, the webs that were produced had some common messages within them summarized in Figure 4.

What emerged was the extent to which their realized strategy was based on technology and 'technological fix'. There was a belief that new products, or variants of existing products, were required to demonstrate the innovatory capabilities of Metto. Moreover, each manufacturing plant tended to assume that its success was dependent on the extent to which it could demonstrate such innovation. Products therefore tended to become 'owned' locally. This took place within a culture which tended to assume superior knowledge to that of customers about what was required; Metto saw themselves as the 'experts' in the industry.

The power in the business was historically and currently centred on regional 'barons' who headed up manufacturing plants and controlled localized research and development. Products not originating from the local production facility were not generally as highly regarded locally as those that had. The plants competed between themselves for central resources and, indeed, for each others' profit margins through a system of transfer pricing which had further increased the standing of the dominant manufacturing centre in Germany which controlled many successful products. The organizational structure had cemented this power structure. Metto had been run on a decentralized basis with considerable local autonomy and discretion. While the new parent company was seeking to co-ordinate strategy, this was a break with the past; such coordination as had existed

Figure 4   Metto
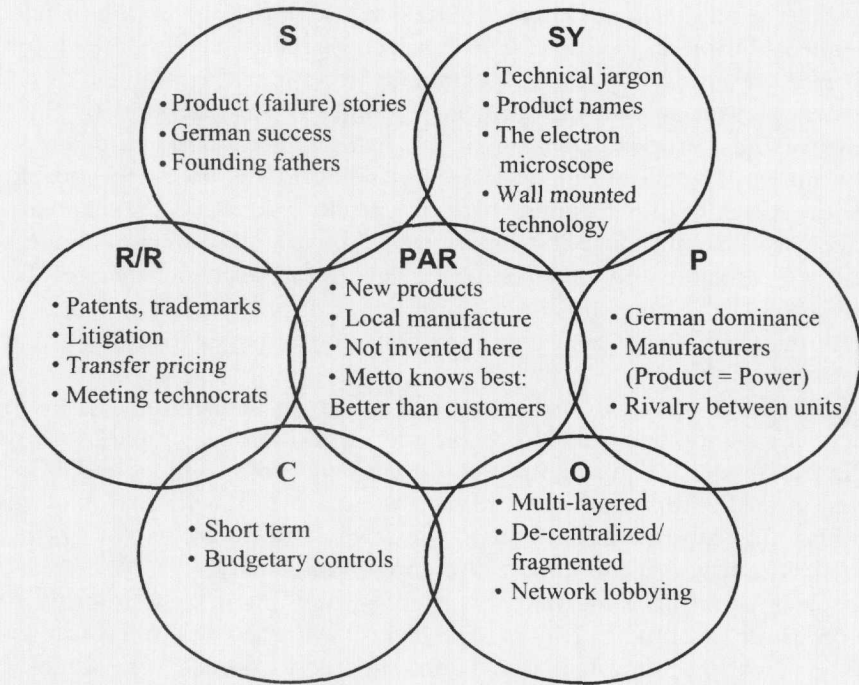
historically was done on the basis of informal networking and lobbying. Control had not been strategic but based on relatively short-term budgetary systems.

There was a reliance on patent protection as an attempt to gain competitive advantage. The managers themselves described the round of patent application, protection and litigation against any infringements as 'ritualistic' and doubted its efficacy; but it persisted. This reliance on the technical aspects of the business was reflected in the emphasis on technical personnel. The new CEO commented that, on visiting subsidiaries, he was always introduced to them first and, until he had asked, had not been introduced to a sales person.

Not surprisingly there were many stories of product successes and failures and of the dominance of the Germans. There were also stories of the origins of the firm, its technological foundations and its associated founding fathers. The symbols they highlighted also tended to be associated with technology; the technical jargon, technical product names, mounted photographs of technical applications on office walls and the oft-quoted ultimate status symbol of the powerful electron micro-scope at the central R&D laboratories.

Theorizing with Managers

This section of the paper relates the discussions with the managers about their cultural webs to concepts and issues in organizational theory and strategic management with the aim of developing further insights into such issues. Three

recurring themes have been selected for discussion: the notion of collective mind, organizational routines, and the management of strategic change.

1.   *The Notion of Collective Mind*

As noted earlier, there have been parallels drawn between the concepts of organizational culture and collective cognition in organizations. Interest in managerial and organizational cognition has taken the form of the search for a greater understanding of managerial sense-making and how this contributes to individual issue identification and group decision-making. The idea of 'collective mind' has been conceptualized and discussed (Shrivastava and Schneider, 1984; Bougon, 1992; Schneider and Angelmar, 1993), though the likelihood of a commonality or congruence of cognitions across individuals in an organization remains problematic (Klimoski and Mohammed, 1994; Johnson, 1999). Those who seek a cognitive explanation of decision-making have suggested that it may be facilitated through cognitive compatibility, an overlap of cognitions among managers (Reger and Huff, 1993; Hodgkinson and Johnson, 1994; Barr and Huff, 1997; Langfield-Smith, 1992); or by managers recognizing others' cognitions through discourse or knowledge of their activities (Edwards, 1991; Larson and Christensen, 1993; Weick and Roberts, 1993). Others have argued that shared assumptions or culture is an appropriate way of conceiving of such collectivity (Schein, 1992; Sathe, 1985).

There is evidence from the similarity of the webs across groups, as perceived by managers, that commonality might exist in cultural terms. It was common for there to emerge a perception that the organization not only had a core set of assumptions, but that combined with other aspects of the cultural web, this constituted an overarching and persistent theme which helped to account for the organization's development. However, examination of the webs produced by different groups within the same organization suggests that this needs to be carefully qualified. It has already been explained that the webs themselves are the product of discussion in groups, usually characterized by a search for consensus as to how to represent the organization's culture. Arguably one of the benefits of the cultural web is that it provides a way in which this can be done. However, this would not necessarily result in commonalities between groups within the same organization. Indeed, when groups presented webs to each other, as with the four groups from Metto, the contents of the webs appeared to the author to be different both in wording—hardly surprising—but also in the specificity of content. However, in the context of the workshops, participants from the same organization typically saw the webs as similar. This was the case both in Metto between the four groups, and in the second of the two NHS workshops which was shown the output from the first workshop. The author showed the 1995 web to the 1999 group with the expectation that there would follow a discussion of differences; in fact the response was to see it as 'much the same'. There are several possible explanations for this. The first is that there is a collective expectation of, or pressure to see, similarities among participants: that they are selective in terms of what they see as similar and ignore differences. The second explanation is that the webs signify an overarching meaning to the managers. For example, the notion that the NHS is a public service dominated by clinical and professional expertise is both explicitly and symbolically represented within the webs. It is not

the specific content of the web that is of significance here, but its meaning. A third explanation, not incompatible with the others, is that there are indeed core assumptions and artefacts which are held in common; for example, the centrality of clinical values and experience in the NHS, or of product innovation in Metto.

The idea of fundamental assumptions and meaning surfaced in the webs is similar to the notion of 'superordinate' concepts (Mervis and Rosch, 1981; Porac and Thomas, 1990) in the literature on cognition. These may be very simple concepts on the face of it—and indeed may need to be if they are to be commonly held—but are typically imbued with two characteristics. First, they are critically linked to subordinate constructs and therefore may be stimulated when any subordinate constructs are themselves stimulated. Second, they are likely to have a high degree of emotional attachment; they are about important themes, arguably the raison d'être of the organization. Faced with threats to the integrity of such fundamentals, individuals cohere around them. The intervention by government in the NHS in the early 1990s with the intent of changing many of the practices and power bases inherent in the system triggered a reference back by many in the NHS to overarching core values and assumptions.

Similarities across webs are not exclusively concerned with assumptions within the paradigm. There are also organizational 'artefacts' and behaviours which appear repeatedly across webs. In Metto different groups reported similarly on the ritualized nature of patent protection and litigation and the routinized defence of territoriality. The routines, rituals and symbols associated with clinical expertise and 'putting patients in their place' were repeated in the NHS webs. It could be that a search for explanations of cognitive collectivity might also be advanced by examining similarity in terms of action and symbol as an explanation of collective cognition or 'collective mind'. For example, Weick and Roberts (1993) show how routines, stories and language help build 'heedful' interrelationships that allow the most meticulous collective action. They argue that in order to understand 'collective mind' it is necessary to understand the complex pattern of mutually adjusted and interrelated activities that comprise the organization; that the variety of individual cognition in organizations is reconciled through organizational processes. In the context of this paper, the argument is that the culture described in the web is sufficiently directive of collective decisions and actions, not only to cope with cognitive and cultural diversity, but to meld this into collective activity approximating to 'collective mind'.

2. *Organizational Routines*

The importance of understanding the role of organizational routines has been highlighted both by those interested in the competitive performance of firms (Nelson and Winter, 1982; Barney, 1986; Teece and Pisano, 1994) and those interested in change (Beer et al., 1990; Pettigrew and Whipp, 1991; Johnson, 1990, 1992).

Cohen et al. (1996) argue that it is important to understand routines within the context of 'quasi genetic traits' in organizations. These are enduring traits 'tested' in the environment. They suggest it is useful to think of routines within a hierarchy of such traits. At the most basic level are automatic repetitive routines; next are 'rules of thumb', simple decision rules which might be employed

consciously; heuristics and strategies are seen as concepts which provide the orientation and guidelines for dealing with problems; and finally there are (in their words) paradigms and cognitive frameworks 'so fundamental to the cognitive activity of the actor that they affect perception as well as problem solving' (1996: 663). The implication of such a hierarchy is that these levels are somehow discrete. The suggestion here is that they are not. Rather, while the hierarchy is useful descriptively, the linkages within and between the levels are important. Undoubtedly there are basic routines evident in both the NHS and Metto, but of more interest are the linkages that occur between routines and what Cohen and his colleagues might regard as higher-level heuristics and the paradigm. Weick and Roberts's (1993) idea of 'heedfulness' may not be generalizable to other organizations, but their observations about interrelationships between cognition and organizational processes may be. Some examples make this clearer in terms of responses to organizational pressures.

It was a well rehearsed response to competitive pressures in Metto to employ routines of innovation, rituals of patenting, and if necessary litigation, to demonstrate technical expertise externally and power internally. Clearly these routines and rituals are closely linked, not only to how to respond to such pressures (heuristics), but also to the overarching paradigm of technical excellence. Similarly, in the NHS the clinical routines and rituals and patient infantilizing are linked to higher-order values and assumptions (paradigm) and provide ready responses to the pressures of the workplace and threats of external intervention. In the NHS and Metto it is more helpful to regard routines and rituals of everyday life as linked to, indeed embedding, core assumptions and values in the organization. There is a symbiotic relationship between ideational/cognitive aspects of organization and organizational structures and processes. This is in line with cultural theorists who argue that: 'Values and social relations are mutually interdependent and reinforcing. Institutions generate distinctive sets of preferences, and adherence to certain values legitimizes corresponding institutional arrangements. Asking which comes first or which should be given causal priority is a nonstarter' (Thompson et al., 1990: 21).

Johnson (1988) has also suggested how such linkages take form in the compensation of one set of artefacts with another. He shows how, in circumstances of external threats, or strategic change giving rise to political conflict or tension, there is likely to be heightened symbolic activity, such as storytelling of the past, which refers organizational members to core ideologies and has the effect of diffusing threats. For example, in Metto, although the potentially negative influence of the 'barons' was discussed informally, it was rarely raised in formal management meetings. If it was, the subject would be turned quickly to stories of product successes and failures, a way of emphasizing the importance of 'getting this product right' and product innovation—the province of the 'barons' themselves and a core element within the paradigm. In effect one or more elements in the web are called upon to support core ideologies under threat or unsupported from others.

The managers from the NHS, in considering the web they produced, offered the view that this was a highly flexible system of dealing with conflict and diversity and yet retaining coherence around a core theme. The NHS is made up of subcultures including clinicians, nurses and administrators. To an extent each have

different sets of assumptions about their roles and these can give rise to conflict. Indeed the differences are underpinned by different routines, controls, stories and, not least, symbols such as dress. Yet the participants in the workshop went on to observe that under threat to the system as a whole, there was sufficient homogeneity of core assumptions, routines and symbols to achieve coherence; and the use of stories of heroic resistance (usually by clinicians) helped reinforce the norms held in common. The 1995 workshop used an analogy to make the point. They suggested that executives, themselves included, tended to conceive of organizations as pyramids, when a more appropriate image would be a 'termite's nest' in which everyday routines, mutual adjustment and deference ensured things happened. Many of the more formalized controls and structures introduced in the NHS had been imposed by management on the assumption that they would effect changes; but this assumed a structure of order that was essentially pyramidal. Within the 'termite's nest' there was a capacity to adjust to such intrusions while carrying on with the routines—the reality—of organizational life.

It is, then, important to recognize the links between routines and 'higher-order' assumptions and values. In turn, this helps explain organizational responses to forces for change. There is a fine dividing line between organizational adjustment and organizational inertia. The organization that can exhibit resilience in the face of adversity and find ways to cope with delivering its services can also demonstrate intransigence in the face of attempts to change the bases upon which it does so.

3.   The Management of Strategic Change

For managers the idea remains strong that by means of an intellectual exploration (perhaps called planning) core assumptions about existing strategy will be questioned and new strategic direction built. Strategy resolution is portrayed as an essentially analytic, evaluative, even cerebral activity, the concomitant of which is that strategic change is a matter of intellectual argument and control or persuasion through changed structures and systems. The organizations reported here were engaged in strategic planning and espoused strategic change was accompanied by changes to organizational structure and the designated roles of organizational members. However, it was evident in all three organizations that such re-designation of structure and roles was not achieving changes in realized strategy; executives taking part in the workshops recognized the relative inadequacy of essentially structural mechanisms in the face of organizational culture.

Studies of the effectiveness of change programmes suggest that there is a need to embrace organizational interaction within notions of structure (Ranson et al., 1980) and emphasize the importance of ensuring that the everyday aspects of organizational activity are changed (Pettigrew, 1985; Pettigrew and Whipp, 1991). Others have explicitly argued the efficacy of manipulation of everyday processes and behaviour (Nutt, 1987; Poole et al., 1989; Beer et al., 1990), routines (Tranfield and Smith, 1998) and symbols (Martin and Siehl, 1983; Biggart, 1977; Pfeffer, 1981; Isabella, 1990). Such writers, then, argue that culture can be managed to achieve strategic change; in effect, aspects of culture described here within the cultural web can be conceived as levers of change.

There are, however, those who question such assertions. Ogbonna and Harris (1998) argue that culture change programmes can result in compliance to change

without the underlying values of people being affected. The implication is that organizational members may 'go along' with change programmes but that fundamental assumptions and values still reign. Willmott (1993) goes further, arguing that the very notion of the manipulation of culture verges on Orwellian control, whereas individuals within the system 'contrive to distance themselves from the roles that they play' (p. 537). This raises the question of what evidence, if any, from these workshops emerges as to the likelihood or actuality of the management of organizational culture.

Certainly the participants found the exercise of surfacing dimensions of organizational culture useful; but this was primarily as a means of understanding blockages to and problems of change. However, a number of the workshops also employed the web to envision the 'required' culture of the organization, given a stated aspiration for that organization. Techniques by which this has been done have been reported elsewhere (Heracleous and Langham, 1996; Johnson, 1998).

Managers found it relatively easy to describe the desired paradigm; it was a reflection of the intended strategy. For Metto all agreed that what was required was an integrated European operation, building differentiation around high-quality service to customers based on in-depth understanding of customer processes. It was not product technology that would give them competitive advantage, but understanding their customers' businesses and processes better than the competition, tailoring products and services to that requirement with a greater emphasis on cross-European cooperation. However, in Metto, as in other organizations, an interesting pattern emerged when it came to considering other aspects of the web. They found it easy to identify the structural and systemic aspects of the organization; to some extent the senior management in Metto had already been down this route by setting up a European Division; and they further suggested the importance of a European strategic plan with control and reward systems linked to this. It was more difficult for them to conceive of the day-to-day aspects of organizational culture and what they would need to be like if the strategy were to be effective. The suggestions that surfaced included emphasizing pan-European working and cooperation (holding meetings in different European locations, organizing European-wide sales conferences, and helping personnel to develop language skills); and recognizing the importance of sales and marketing rather than technical personnel (setting up a 'top performers' club' for sales people, and the CEO meeting sales personnel before technical people on visits to different locations). It was also felt that the day-to-day surroundings of offices should focus on customers; for example, technical photographs of products could be replaced by illustrations of projects undertaken for customers. They also thought that stories of change might be generated in such ways and passed round the business. However, many of these ideas were little more than amendments to, or reversals of, routine and symbolic aspects of the culture as shown in the web (Figure 4). In this respect it suggests that managers had difficulty in conceiving of routine and symbolic aspects of managing.

In other workshops the proposition that such cultural change could be managed was questioned. For example, in the workshop with NHS executives the notion of strategic change through 'serendipity' arose. The argument put forward was that change was not necessarily managed, that it occurred in ways which were not predictable and through activities which might not seem especially significant at

the time, but could have major consequences. On other occasions such stimuli might be the result of management action, but without the expected result. For example, Pratt and Rafaeli (1997) report how the head nurse in a recovery unit for acute patients wanted nurses to wear everyday clothes to signal to patients that they should no longer think of themselves as ill—a planned symbolic action addressing patient care. The unpredicted consequence was concern among the nurses about their professional status and role in decision-making about patient care; after all, the nurses' uniforms represented their professional standing.

   Two observations can be made here. First, it is clear that managers find it difficult to 'plan' culture change, not least because the cultural dimensions of the organization they experience are not necessarily the dimensions that others experience; it is, then, difficult for them to understand or predict the meaning or impact on others of changes in routines and symbols. By their nature, symbols are interpretative (Louis, 1983); meaning is placed upon them. Second, even if managers are able to identify some meaningful routine or symbol which they believe could galvanize change, the will and cooperation of those involved are still required. Executives in the 1995 NHS workshop told how they had tried to persuade clinicians of the need to change established practice to meet the needs of patients more efficiently and respectfully. In the past, for example, clinicians had insisted that patients queued for consultations at times suited to themselves. In one hospital the procedure was for patients to sit waiting in white gowns, having removed their own clothes. Hospital managers tried to persuade the clinician concerned that it was not necessary for patients to be so treated. The clinician, while agreeing in principle, continued the practice. Eventually, the managers removed the gowns from the changing rooms to prevent the practice; the clinician brought in his own gowns and the practice continued.

   This is not to say that change cannot be promoted through the sort of exercise described here. The value in promoting change may be in the act of surfacing problems of change. In the case of Metto it was clear that there was a reticence among some participants in the workshop to surface some delicate issues. The frustration felt by a French manager that key issues were not being discussed openly resulted in the 'outing' of the 'German issue'. When the groups presented the webs to each other, each one had within it an allusion to the dominance of the German plant and its managers, but not in any precise form. As the discussion of the webs proceeded it became clear that, whatever such allusions referred to, their open airing was being avoided. After some time the French manager asked: 'Are we going to talk about it or not?' He did not need to specify what 'it' meant; it was clear that this was understood. The response from another manager was: 'We should break and go to the bar for a drink.' Others disagreed and the matter eventually and dramatically came to a head when one of the participants pointed to the managers from the German plant and said: 'If we don't talk about this we're all wasting our time here; we all know they're raping us.' There then followed a heated debate about the view that the German plant was the embodiment of parochialism in the firm and was using the transfer pricing system to benefit itself at the expense of others. The German managers, though extremely annoyed by the discussion, later admitted that they had no idea of the depth of feeling on the situation; and they took part in setting up new systems of collaboration for the future. The story is now recited within the business as a trigger for major change.

While it is problematic to conceive of the role of management as planning changes to culture, it might be useful to see their role in terms of sensing, responding to and building upon contexts, events and signals which can help promote and overcome resistance to change. This is much more in line with the concept of organizational culture as subjective, with managers as part of it, rather than culture as objective and managers as somehow distanced from it and able to manipulate it in a precise way.

Implications for Research with Managers

This paper has shown that the mapping of organizational culture can be a useful exercise both for the managers engaged in the process and as a means of gaining insight into aspects of management research and theory. Such an approach could be used to advance our understanding on important topics.

The cultures described here are organizationally specific; yet there are indications of commonalties across organizations, for example in the NHS. This supports the arguments advanced by institutional theorists. However, the level of analysis in cultural terms is a good deal more specific and detailed than would be found in institutional research. Nonetheless there emerges an interesting speculation, which is that the isomorphic tendencies which institutionalists explain in rather generalized terms as mimetic processes (DiMaggio and Powell, 1983; Haunschild and Miner, 1997) can be explained and studied at a much more everyday level. If so, this would help address the increasing call to 'make neo-institutionalism's micro foundations explicit' (DiMaggio and Powell, 1991: 16). In turn this raises the problem of systematic identification of cultures across, rather than within, organizations. The elicitation of culture described here required preliminary explanation and considerable management time facilitated by managers' substantial interest in organizationally specific issues. How this might be achieved if the requirement is larger samples for comparative purposes, and managers are regarded as data providers rather than active participants, is problematic. There are of course precedents for such problems. Anthropologists have attempted to incorporate situationally specific studies into generic models of culture—for example in terms of cultural theory (Douglas, 1970)—and lessons for organizational research might be drawn from such an approach, as well as conclusions which point to patterns across societies and groups linking ideational and symbolic aspects of culture.

The link between cognition and organizational activity is emerging as an important basis of conceiving of organizations, management and change. Walsh (1995) has argued the need to further develop theoretical models and build research methods which permit the study of linkages between cognition and action. This paper has shown that one way of approaching this problem at the group level is through the device of the cultural web which links formal systems, everyday routines and symbolic aspects of organizations and ideational culture, and thus informs collective cognition.

If such work is to be undertaken, then the ideas inherent in 'mode 2' research practice have to be taken seriously and developed. On the basis of the experience of the workshops reported here, some observations might be helpful. It is not

necessary to separate the interaction with managers for their benefit from the pursuit of academic endeavour; relevance and theory are not incompatible. However, there are some principles which have to be borne in mind. The first is that there is nothing wrong with theorizing for managers. They are interested in theory anyway because it can shed new light on their experience; but if managers are expected, in turn, to help develop theory, they need to understand it. It does mean that academics have to learn to explain theory in ways which have meaning and relevance to managers; but that should be seen as a proper challenge to the management academic. The second principle is that there is a requirement for academics to enter the 'real world' of managers; to see beyond the myths, legends and received wisdom that any group working together tends to develop. The cultural web is a useful device for doing this because it encourages managers to engage in discussion of that world; but whatever approach is used, there is a need to engage at that level. The third principle is again self-evident. It is the proper role of academics to theorize. A 'mode 2' approach to research does not mean that academics should expect managers to do this for them. They need to become skilled in leveraging managers' discussion and debate into theorizing.

Conclusion

Theories of social cognition and organizational culture are developing and have become established in the field of management studies. Similarly, there has been much academic study of problems of change in organizations. However, there has been less evidence of the extent to which these conceptual developments have achieved managerial impact. This paper has sought to explore these topics by specifying a model to explicate the concept of organizational culture for managers; and reporting on work undertaken directly with managers which builds on such concepts. The particular issues addressed here have been to do with collective cognition, organizational routines and the management of strategic change. The unifying theme developed in the discussion is that an understanding of the links between organizational processes, often in terms of everyday routines and symbols and core assumptions, helps explain collective framing of issues, collective response to such issues and problems of strategic change.

A second aim of this paper has been to demonstrate the value of approaching important practical and theoretical issues of management through the experience of managers themselves and in turn engaging with them in enquiry relevant to such issues. By so doing, it is possible to learn from managers about the relevance of such ideas to their world, to gain fresh and useful insights and to further advance theoretical understanding.

Acknowledgement

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