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ODD COUPLE: MAKING SENSE OF THE CURIOUS CONCEPT OF KNOWLEDGE MANAGEMENT

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ABSTRACT

The idea of knowledge management draws currently much attention, both among practitioners and scholars. Advocates of the term argue that knowledge management points to a new set of phenomena and practices for managers to learn and master. In particular knowledge management focuses on the creation and distribution of knowledge in organizations through technological novelties such as the internet, intranets, and e-mail, although there are also streams concentrating on social relations and interactions. This paper examines several possible conceptualizations of the idea of knowledge management. It is argued that knowledge is an ambiguous, unspecific and dynamic phenomenon, intrinsically related to meaning, understanding and process, and therefore difficult to manage. There is thus a contradiction between knowledge and management. Drawing from a literature review and a case study, it is suggested that knowledge management is as likely, if not more so, to operate as a practice of managing people or information than as a practice attuned towards facilitating knowledge creation.

INTRODUCTION

Recently the idea of knowledge management has seemingly captured the imagination of practitioners, as well as scholars, of business administration. At least the buzz is there: the coverage in business magazines, the interest from consultancy companies as well as from academics, is expressed in research conferences and in special issues in journals. Proponents of knowledge management are well aware of the faddish and fashionable characteristics of management ideas, but are convinced that the phenomenon is 'not merely some passing fad, but is in the process of establishing itself as a new aspect of management and organization and as a new form of expertise' (Hull, 2000, p. 49).

Knowledge and management are concepts that obviously have been around for a while. The combination, 'knowledge management' is, however, fairly recent. It can be traced to the emergence of communications technologies that create access

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to computerized networks that allows for (almost) real-time interaction, regardless of physical distance; technologies such as the internet, intranets, e-mail, and the world wide web (Hansen et al., 1999; Koenig, 1999). However, the road for the idea of knowledge management has been well paved in organization analysis. It resonates well with current ideas of knowledge work and knowledge-intensive firms (KIFs) (Alvesson, 1993, 1995), with ideas on organizational learning, and with much thinking on organizational culture.

The relatively broad interest in, and application of, the concept of knowledge management demonstrated by organizational analysts may be further explained by the fact that there is a strong divide between those interested in the technology aspects, and those emphasizing the 'people side' of knowledge management. For the latter 'people side' IT makes things easier, but IT is only an instrument making the library or mail work quicker and more economically.

> There is much more to knowledge management than technology alone. Knowledge management is a *business process*. (Sarvary, 1999, p. 95)

Knowledge management is not seen as a matter of building a large electronic library, 'but by connecting people so they can think together' (McDermott, 1999, p. 104). Also most executives seem to understand that knowledge is highly people-based, but 'they are stuck with an investment model that is geared primarily toward technology implementations' (Ruggles, 1998, p. 86). Within this 'knowledge management is people' camp, which seems to dominate at least the social science academic wing of the knowledge management industry, there is – we argue – a fundamental division between an emphasis on knowledge and on management. This division reflects tensions and contradictions in the idea of knowledge management.

It is clear that the idea that knowledge can somehow be managed has great appeal. Knowledge management can be seen as an umbrella term for a wide spectrum of academic orientations. These include information systems and organizational learning but also strategic management and innovation. There are good reasons for academics wanting to associate themselves (ourselves) with something that appears to be significant and relevant in a broad arena. Labels that attract a broad audience and have a strong rhetorical appeal are, however, frequently tricky to use in a coherent manner. In this paper we will draw attention to fundamental problems with the idea of the manageability of knowledge, at least in a managerialist sense. Knowledge management is inherently problematic as a concept. Most uses of it tend to be either tension-ridden or trivial. Typically, authors struggling with the concept slide either to a 'knowledge' or a 'management' pole, or move away from what may be seen as typical meanings of these two labels (for example in the direction of community creation and maintenance). Put bluntly, the more management, the less knowledge to 'manage', and the more 'knowledge' matters, the less space there is for management to make a difference. Drawing from the literature on knowledge and knowledge work, we will show that the oxymoronic character of the concept of knowledge management is difficult to resolve. However, although conceptually problematic, we will argue that the term, properly reconstructed, may have limited, but illuminating, pragmatic and interpretative value. Thus, drawing from a case study, the paper also attempts to illustrate strategies for making sense of knowledge management among members of a large consultancy corporation.

This paper mainly addresses ideas on knowledge management relatively broadly. Part of the paper is a critical review of the literature that is typically not confined to particular sectors of the economy or versions of knowledge management, but favours a generalizing, often somewhat broad-brushed, approach. However, as our empirical work is in the sector of knowledge-intensive firms (KIFs), the paper has some bias in the direction of KIFs, in particular in professional service companies (e.g. management and IT consultancies). These companies are frequently represented in the literature on knowledge management, mainly perhaps, because there are good reasons to believe that knowledge management – to the extent that the label corresponds to ambitious corporate practices and ideologies – has a strong presence there. We report briefly a case study of knowledge management in a large IT/management consultancy firm, illustrating some of our arguments.

We will start with a discussion of the concepts of knowledge and management. A critical review of the literature on knowledge management will follow, organized along the dimensions of *mode of coordination/control* and *medium of interaction*. Thus having established the key analytical dimensions for interpreting our case, the case is described and analysed. Finally, we discuss our findings in relation to the literature on knowledge management.

THE CONCEPT OF KNOWLEDGE: INCONSISTENT, VAGUE, BROAD, TWO-FACED AND UNRELIABLE

There are many, highly diverse understandings of knowledge. One version is to see it in a restricted way, following a slightly outdated view on science: Bell, for example, defined knowledge as

> that which is objectively known, an intellectual property, attached to a name or a group of names and certified by copyright or some other form of recognition (e.g. publication). (Cited in McGrath, 2000, p. 32)

This is a narrow view that is different from what we find in more contemporary writings on knowledge. In the knowledge management literature a broader, less formalistic understanding of knowledge prevails. Here, many authors emphasize the subjective, tacit situational and dynamic dimensions of knowledge:

> Knowledge is a subset of information; it is subjective; it is linked to meaningful behavior; and it has tacit elements born of experience. (Leonard and Sensiper, 1998, p. 113)

> Knowledge is always recreated in the present moment. Most of us cannot articulate what we know. It is largely invisible and often comes to mind when we need it to answer a question or solve a problem. (McDermott, 1999)

We will here briefly indicate five problems with popular understandings of knowledge: (a) ontological incoherence; (b) vagueness; (c) an all-embracing and somewhat empty view on knowledge; (d) objectivity and robustness; and (e) functionalism.

Ontological Incoherence

The idea of knowledge management builds upon a widespread but rather peculiar understanding of the nature of knowledge. From this perspective knowledge is treated as a functional resource, representing a 'truth' on a subject matter and/or a set of principles or techniques for dealing with things or social phenomena (cf. Spender, 1996a). Nonaka (1994), for example, defines knowledge as 'justified true beliefs', thus underscoring the importance of truth and principled justification.

This view is blended with social constructivist ideas about the nature of knowledge development. Within a large part of this literature there is a somewhat odd mixture of emphasis on the subjective, tacit and social constructed nature of knowledge (or at least its creation), on the one hand, and a notion of knowledge as true, verified, functional and non-problematic, on the other. Such an approach owes much, if not all, of its persuasive power to the Cartesian distinction between knowing subjects and knowable objects. The problem is that in social reality, where the knowable objects pretty much only exist as knowing subjects, this approach creates confusion (cf. Shotter, 1993).

Vagueness

Apart from rather incoherent, not to say contradictory ideas on the nature of knowledge, researchers seem to have difficulties in saying something distinct about the specific content of the knowledge that presumably is so central in their work (e.g. Grant, 1996). Sometimes researchers refer to the great variety of forms of knowledge, making a distinct general definition impossible. However, in a review of the KIF literature, McGrath (2000) concludes that it offers little 'in terms of clarity or agreement over the nature of knowledge used within KIFs and typically tends to sidestep or "black-box" the issue' (p. 82).

Not only do researchers have problems saying something distinct about knowledge; practitioners also tend to be vague – this is of course a major restriction for the possibilities of researchers to move ahead. In KIFs practitioners typically refer to a combination of formal or theoretical knowledge, soft skills (interacting with people), a mindset or an understanding of the tasks associated with a loose framework or intelligence and/or a general understanding of the area (Alvesson, 2001a).

Knowledge is Everything, Everything is Knowledge

A concept or idea of potential value should cover broad terrain but in a specific way. Wide-ranging concepts tend to be rather empty: they may cover everything and nothing. One major problem with 'knowledge' is to delimit the concept. Knowledge may be encyclopaedic – concerning facts about the world. It may be procedural, telling how to accomplish certain effects. It may be social, telling us when to use encyclopaedic and procedural knowledge. It may be explanatory, telling us why. Ultimately, knowledge has many manifestations and is also manifested in many ways – encultured, embodied, encoded, embedded, and embrained (Blackler, 1995), to mention some possibilities. Davenport and Prusak (1998) define knowledge as follows:

> Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of

> knowers. In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, processes, practices and norms. (p. 5)

The irony, or the problem in these cases, is that if knowledge means that much, the usage of the word informs us less and less. It easily becomes a new label for covering a rich diversity of more or less known phenomena. Blackler's typology, for example, may be interpreted as an attempt to re-label phenomena previously labelled other things in knowledge terms: embodied knowledge is a re-labelling of practical skills, encultured knowledge a new term for (organizational, professional) culture, etc. To be sure, re-labelling also involves a cognitive metaphorical quality and may inspire new ways of thinking, so our point here is not solely negative. However, students of knowledge may be wise in considering Geertz's (1973) view on cultural analysis, where he suggests that one should cut the concept of culture 'down in size so that it covers less and reveals more'. It is possible, for example, that not much insight is added through labelling rules 'embedded knowledge' or in putting together all the rather diverse aspects that Davenport and Prusak assemble in their definition (see above).

Knowledge: Objective and Reliable?

The idea of knowledge management draws much of its power from the idea that knowledge reliably can be separated from the individual and thus stored and retrieved. From a knowledge management point of view, knowledge is thus objective (justified true belief) and thing-like. However, as scholars, we do not have to look far to find arguments against objectivistic and reified understandings of knowledge. One can point to the uncertainties and controversies characterizing a lot of science (Brante, 1988) as well as to the fact that, whatever the relative degree of rationality characterizing science and formal knowledge, people act much less rationally (Fores et al., 1991). Few knowledge-workers in business operate according to a handbook in scientific methodology. These two uncertainties make the impact of the 'knowledge-factor' or esoteric expertise much less clear-cut in practice.

Functionalism: Is Knowledge a Generally Good Thing?

A common take on knowledge seems to be to accept or side-step the inherent problems of defining the concept, but go on and use it anyway. Authors emphasize the social nature of knowledge creation but they regularly stop short of acknowledging the socially constructed nature of knowledge itself. Instead a highly functionalistic understanding of knowledge prevails. The logic seems to be as follows: 'we don't know what knowledge is but it seems to solve problems in a functional way, so let's use it anyway'.

The problem is that 'knowledge' is not necessary functional, useful, and a generally good thing. Whether what is defined as knowledge really solves problems is frequently not self-evident. In addition to the problems of the claimed objectivity of knowledge, it could be argued that it sometimes creates problems, through imprinting a norm of what things should be like and indicating a gap between current imperfections and the ideal. This is frequently the situation exploited by, for example, management consultants (Clark, 1995, Ch. 1; Sturdy, 1997) and other people marketing new panaceas for business practices. According to Foucault

(1976, 1980), knowledge and power are intrinsically related. Knowledge creates a space for the exercise of power. The exercise of power, in return, makes knowledge possible. For Foucault, knowledge is not an innocent or neutral tool for accomplishing something socially valuable, but is closely related to power. Knowledge creates rather than reveals truths. It imprints standards for being that disciplines and subordinates the individual.

Consequently, knowledge is not necessarily virtuous. There are potentially negative or dangerous dimensions of it: the capacity of knowledge to locate reality, to produce the institutions and subjects that it simply claims to describe and explain. Knowledge enables and constrains. An intervention of a supposedly knowledgeable actor may work for other reasons than the functionality of the knowledge involved. The intervention may be effective due to creating energy or hope or creating a shared understanding – something that may actually be facilitated by 'rationality' in terms of knowledge use: decision rationality – grounded in sophisticated use of knowledge and analysis, may counteract 'action rationality' (Brunsson, 1985). Seeing knowledge as a simple resource in the hands of capable subjects may also bring the understanding to a premature closure: knowledge – based upon, or fused with, myths, fashions and power-potentials – may control subjects and institutions as much as the opposite.

THE MEANING AND CONSEQUENCES OF MANAGEMENT

People interested in knowledge management typically find the knowledge part of the concept more intriguing and, lacking a better word, more important than the management part. The inclination to divide knowledge up in a four-fielder is seldom accompanied by a similar move to sort out versions of management. While knowledge is seen as calling for at least some exploration, management is typically not seen as deserving this honour. In fact, most literature on knowledge management and/or organizational knowledge creation treats management as something that is either self-evident and unproblematic (i.e. Gore and Gore, 1999; Hansen et al., 1999) or, more commonly, black-boxed and unexplicated (Cook and Brown, 1999; Lam, 2000; Nahapiet and Ghoshal, 1998). Interestingly, the widely cited work of Nonaka (1994) is both an example and an exception from this rule. The latter part of the article consists of a fairly elaborate discussion of the problems of managing knowledge creation. Thus, Nonaka explicitly links managerial practices and knowledge creation in an attempt to provide ideas on how to manage knowledge creation. However, Nonaka does not make any serious attempt to theorize what management is about. In the context of knowledge creation, Nonaka claims that managers are best viewed as 'catalysts'. However, this idea of management remains vague and ultimately seems to be strongly rooted in the rather common-sensical idea that a manager 'sets the direction, provides the field of interaction, selects the participants in the field, establishes the guidelines and deadlines for projects, and supports the innovation process' (Nonaka, 1994, p. 31).

On the other hand, it can be argued that the idea of management *is* rather common-sensical, at least in modern societies. After all, the classic formulations of Fayol – who claimed that managers plan, organize, co-ordinate, and control (cf. Mintzberg, 1989) – and Taylor (1947) – who depicted the manager as the scientifically trained designer of work – seems to be valid. In simple terms, manage-

ment rests on the idea that work can be divided between those who work and those who plan, organize, co-ordinate and control work. In other words, it rests on the idea of vertical division of labour, on hierarchy, and, ultimately, on the bureaucratic phenomenon (Jackall, 1988).

Management's two main objects of focus – to the extent that it addresses people rather than technical issues – are worker behaviour and the minds of the employees. Managerial activity addressing behaviour is typically focused on designing and supervising work processes that minimize the effort and skill necessary for the worker to carry out his or her work. In this sense, Taylorism is perhaps the quintessential managerial approach, in its insistence on designing work context so carefully constructed and heavily controlled that workers only can do the 'right' thing with a minimum of effort and movement. Management targeting minds, through norms, emotions, beliefs and values, is intended to affect behaviour indirectly (Etzioni, 1961). A key concept here, then, is normative control.

> Normative control is the attempt to elicit and direct the required efforts of members by controlling the underlying experience, thoughts, and feeling that guide their actions. Under normative control, members act in the best interest of the company not because they are physically coerced, nor purely from an instrumental concern with economic rewards and sanctions. It is not just their behaviours and activities that are specified, evaluated, and rewarded or punished. Rather, they are driven by internal commitment, strong identification with company goals, intrinsic satisfaction from work. (Kunda, 1992, p. 11)

There exists a plethora of highly diverse ways of typifying, labelling and elaborating various forms of management, starting with Taylor (1947), who distinguished between scientific management and management by initiative and incentive. We will refrain from dipping too much into the vast array of typologies and classifications of management and managerial work offered by the literature. However, we will operate with a distinction between two modes of intervention: co-ordination and control; and a distinction between two domains of intervention: normative and behavioural, thus producing a matrix of four types of management/administration: communal, socio-ideological, clerical, and technocratic (see figure 1).

Managerial intervention in the co-ordination mode can be characterized as 'weaker' and denotes the minimal activities needed for orchestrating collective action. Managerial intervention in the control mode is 'stronger', broader in scope and includes an apparatus for specifying, monitoring and evaluating individual and collective action. Management in the control mode, reserves a fairly active and influential role for management, while management in co-ordination mode mainly refers to a support function and/or less powerful ways of organizing and supervising. Management in the control mode is rooted in the traditional conception outlined above, where management is an activity carried out by a powerful social group who orchestrates and exercises definitional and executive authority over other social groups within an organization. This mode of management claims a particular and scarce form of expertise. It is fundamentally self-contained, socially cohesive, and managerialist (Alvesson and Willmott, 1996; Deetz, 1992).

Management in the co-ordination mode represents the other side of a continuum, in which management is circumscribed in its impact. It may, for example, have

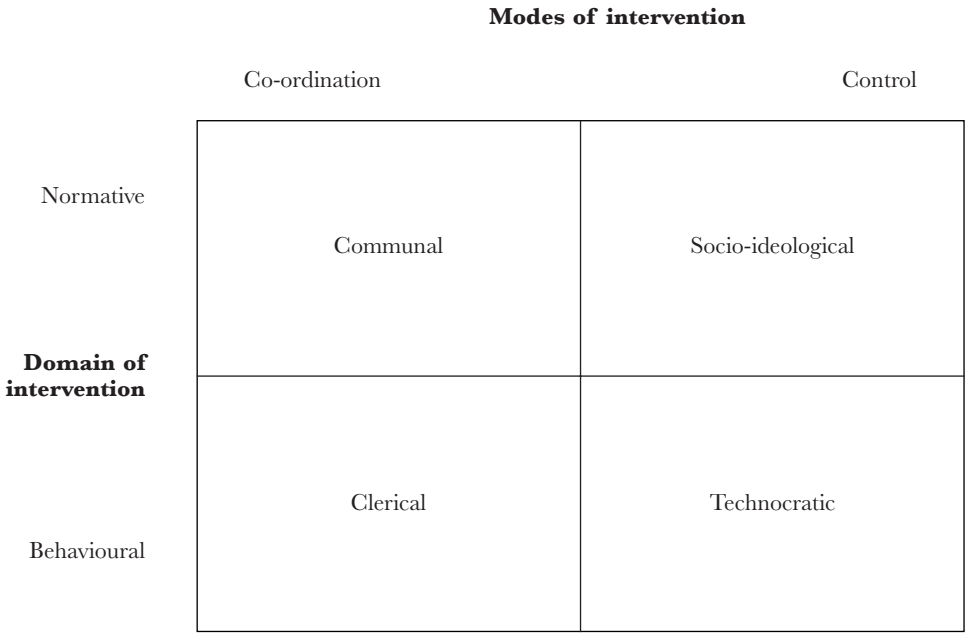

Figure 1. Types of management/administration

limited authority over professionals, because of these having officially sanctioned discretion over their work and the fact that they obey rules and regulations orchestrated by professional associations. In less heavily institutionalized and state-sanctioned situations it may have less impact over the key ingredient in work processes simply because knowledge workers have superior understandings and form the key resource, effectively undoing a conventional asymmetrical relation between management and non-management on vital issues. Managers in knowledge-intensive companies sometimes have limited discretion beyond organizing their own work, may lack definitional authority over other social groups, and even sometimes experience a loss in social status compared to other professionals.

As noted above, management has two principal domains of intervention: it may target worker norms or worker behaviour. Combining the two modes of intervention with the two domains of intervention produces four analytically distinct management types: communal, clerical, socio-ideological and technocratic. In the technocratic type, management works primarily with plans, arrangements and systems focusing behaviour and/or measurable outputs. In the socio-ideological version, social relations, identity formation and ideology are basic ingredients. This is occasionally refered to as leadership and some authors distinguish between managers and leaders (e.g. Zaleznik, 1977), but we do not make this point here as leadership in organizations is typically exercised based on a managerial role. Sometimes management operates over a broad spectrum, but often there is an emphasis either on the technocratic or the socioideological mode (Alvesson, 1995, 2001b). The difference between clerical and communal management types is broadly similar to the differences between technocratic and socioideological types, as the communal type labels efforts to co-ordinate through norms (morale, team spirit)

and the clerical type labels efforts to co-ordinate behaviour (channelling resources and information). However, as the impact on people and operations here is moderate, the apparatus involved is less elaborate, consumes less resources and energy, and simply has less significance for activities.

The distinction between the modes of management is analytical. Any given manager in any given organization may sometimes engage in the co-ordination mode – thus taking a position secondary in influence to worker autonomy or professional community – and sometimes in the control mode, powerfully targeting norms and/or behaviour. Contextual contingencies are, as indicated by the discussion above, likely to influence the frequency and exact rendering of each mode. However, actual contextual contingencies and their effects are on the whole outside the scope of this article.

Although it can be argued that management is everything, the term is most informative when it refers to an agency with considerable authority and discretion, grounded in a formal position, and with an asymmetrical relation to non-managers. By definition a manager calls for somebody to be managed. The less manageable the subjects, the less managerial qualities are required. Of course, management is not omnipotent and the relations may be more or less asymmetrical and/or varied. Sometimes what it is all about becomes mainly a matter of administrative work where the kinship with 'full management' in the control mode is so remote that the management label risks being stretched out too far, and administration is a better label.

KNOWLEDGE MANAGEMENT: EXTENDED LIBRARIES, COMMUNITIES, NORMATIVE CONTROL, AND ENACTED BLUEPRINTS

Knowledge has many meanings. Management has, in the context of organizational analysis, fewer. What about knowledge management? An investigation of how the term is used in the literature reveals that knowledge management is more like knowledge than management in this regard. Knowledge management covers broad terrain indeed. It is 'a term which has now come to be used to describe anything from organizational learning to database management tools' (Ruggles, 1998, p. 80). However, according to Ruggles it is 'more than a sales pitch. It is an approach to adding or creating value by more actively leveraging the know-how, experience and judgement resident within, and in many cases, outside of an organization' (p. 80).

One extreme is to see the selection of assignments (in, for example, knowledge intensive companies in the service sector) as a crucial part of knowledge management, as these represent perhaps the most significant input to learning. It can be argued that knowledge management calls for a broad conceptualization, at least in certain companies. McGrath (2000, p. 40) suggests that:

> As KIFs primarily rely on the knowledge base of their employees . . . then their knowledge management practices should effectively encapsulate the totality of management practices within these firms. All management activity ought to be ultimately directed at the acquisition, development, protection, sharing and exploitation of knowledge within these firms.

Knowledge management can thus mean almost anything – a focus on knowledge issues does not necessarily limit the options that much. Swan et al. (1999) define knowledge management 'very broadly', as 'encompassing any processes and practices concerned with the creation, acquisition, capture, sharing and use of knowledge, skills and expertise (Quintas et al., 1996) whether these are explicitly labelled as "knowledge management" or not' (p. 264). Storey and Quintas (2001) refer to knowledge management as, apart from the creation and sharing, also the sourcing, mapping and measuring of knowledge. There are various synonyms for knowledge management (of which some qualify as metaphors). Knowledge management is seen as information management, as architecture for the spreading of knowledge (Brown and Duguid, 1998, p. 103), as community building and as encouragement of care and altruism associated with knowledge sharing (von Krogh, 1998).

Swan et al. (1999) make a useful distinction between a cognitive network model, focusing IT and information processing, and a community networking model, emphasizing dialogue and sense making through active networking. This reflects a division of interest in the field of knowledge management in the exploitation of knowledge through technical means versus the exploration of knowledge, which heavily focuses on people and interactions (in which case IT may, or may not, be enabling).

To summarize, knowledge management is a very broad concept that is used in a variety of ways. Our paper mainly focuses on ways of thinking about knowledge management and the problems inherent in this very idea. We are therefore more interested in how people in the field of knowledge management define and reason around knowledge, management (although not much is aired on this topic) and knowledge management, than in defining a specific view on knowledge management. We identify four distinctive orientations rather than strict and separate categories of knowledge management, prevalent in both theory and practice. We claim that these four orientations can be arranged along the dimensions of *the medium of interaction* and *the mode of managerial intervention*, as discussed above, thus producing a matrix (see figure 2). As hinted in the section on knowledge, distinctions sometimes cover more than they reveal. Nevertheless, we think that the distinctions used here are useful and valuable because they focus on ways of thinking about knowledge management issues that are easier to represent than knowledge 'as such', partly because how people relate to knowledge management is more 'explicitly discursive'. We also downplay the boundaries and emphasize the various orientations, recognizing that there is a continuum between the end poles and that there are flows and variations within organizations and in texts with regard to how they refer to knowledge management practices.

Knowledge Management as Extended Libraries

This type of knowledge management involves extensive use of the available technology – databases, advanced search systems, sophisticated communication systems, and so on. One definition of knowledge management, then, is that it 'involves blending a company's internal and external information and turning it into actionable knowledge via a technology platform' (DiMattia and Oder, cited in McInerney and LeFevre, 2000, p. 1). In this approach, knowledge management is basically a process run by a particular central agency responsible for the compiling, synthesis and integration of more or less idiosyncratic work and project

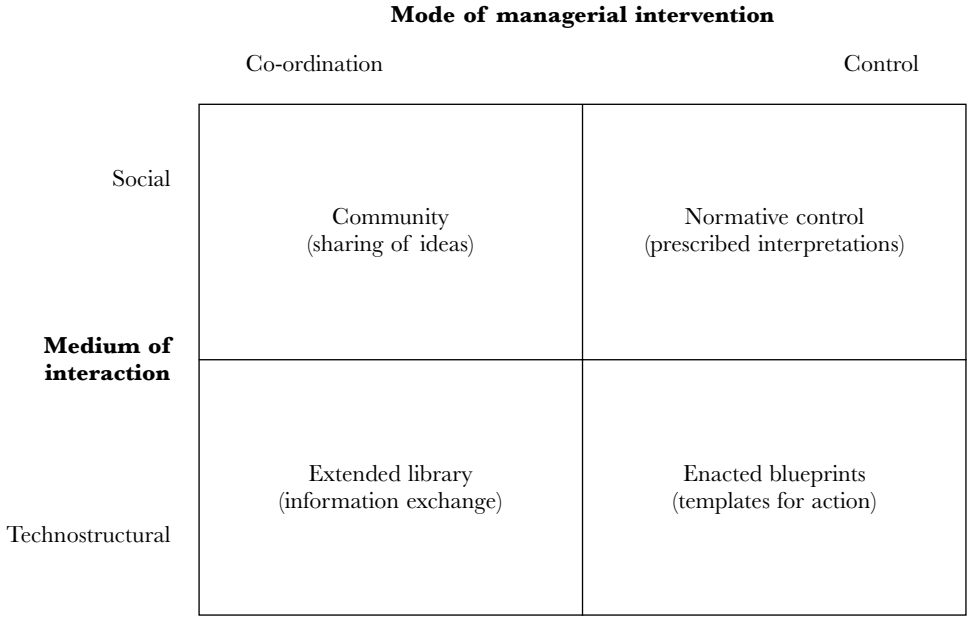

Figure 2. A typology of knowledge management approaches

experiences for the development of general knowledge, in the form of methodologies or solutions guiding further work. Such methodologies may be used more or less actively in the management of the company, i.e. through enforcing rules and prescriptions for working.

This comes rather close to what is normally referred to as bureaucracy. Motives for this may be quicker or better work, but also the underscoring of the coherence of the company, thus facilitating its image and identity. But the effects of the knowledge management system may also be a database or library, accessible as a support for those that need the information. Sarvary (1999), for example, views management consultancies as technology brokers, and Davenport and Prusak (1998) say that librarians frequently act as 'knowledge brokers'. They discover solutions in client firms, and can, after knowledge management-work, use knowledge about these in new ways to solve analogous problems in other companies.

Knowledge Management as Community

Another view of management is less technocratic and adheres to a much 'softer' notion of hierarchy and control. This position is often grounded in an interest in tacit knowledge. Management is then a matter of coping with diversity and of encouraging knowledge sharing through influencing workplace climate.

> Whether we seek to increase the divergence of perspectives as a deliberate strategy for innovation or have the diversity thrust upon us as a necessity we need to manage that rich profusion. (Leonard and Sensiper, 1998, p. 119)

McDermott (1999, p. 116) identifies, then, four challenges associated with knowledge management: (1) a technical one of designing human and information

systems that make information available and help people think together; (2) a social challenge of developing communities that share knowledge and maintain diversity; (3) a management challenge: 'to create an environment that truly values sharing knowledge'; (4) a personal challenge of being open to the ideas of others and to share ideas. From this point of view, management represents a rather small part of knowledge management (at least as long as the technical is not incorporated in it). The managerial aspect of it is not too self-evident: creating an environment is not something that management can do on its own and it is definitely difficult to address in an instrumental way: instead it is a much more dispersed and organic phenomenon.

Some authors – or passages in their texts – give an even more limited role to management than the weak one indicated above. The favoured vocabulary – community, sharing, caring, nurturing social relations – is far from the conventional ideas of management as a bureaucratic phenomenon associated with hierarchy, formalization, control and direction from above through 'rational' measures. It is emphasized that community is fundamental for shaping knowledge (Cohen, 1998, p. 28; Leonard and Sensiper, 1998, p. 121; Swan et al., 1999). Care is said to facilitate innovation, and the ideal, according to von Krogh (1998), is to develop high-care groups characterized by 'indwelling', looking *with* others at their task rather than *at* others. Knowledge sharing involves, then, an element of altruism.

Knowledge Management as Normative Control

Community is difficult to accomplish or control for management. It is basically an organic, social quality, associated with background, long-term commitments, downplayed hierarchy and considerable space also for non-instrumental virtues in a social context. The corporate form is typically not a setting that encourages community formation, but tends to work against it, at least on the level of the whole organization. However, managerial arrangements and acts may be more or less for or against community tendencies. Some companies taking corporate culture seriously have had some success in cultivating community-tendencies across the entire organization (Alvesson, 1995; Kunda, 1992). Even though this is difficult, the level of community is presumably somewhat more accessible for managerial interventions than the one of tacit knowledge. People may be persuaded to define themselves in terms of the same social identity, thereby downplaying boundaries within the organization and being more prepared to co-operate and assist. On a more general level, efforts to build and maintain a feeling of a distinct corporate identity to which employees can identify, and the downplaying of differentiation markers such as suborganizational boundaries and status symbols, may support experiences of community across the organization.

Knowledge management can thus be viewed as an attempt from management to exercise normative control. Several authors on knowledge management emphasize organizational culture, although they seldom develop it or explore the connection (e.g. Ruggles, 1998; Sarvary, 1999). Actually, the interest in community can be said to be a version of organizational culture, although tacit knowledge points to more complex and inaccessible phenomena than the level of shared values, beliefs and norms on which many authors on organizational culture focus. The frequently reported problems of managing or engineering culture provide important lessons for the difficulties in managing communities (Alvesson, 2001a; Martin et al., 1985). The more organic and communitarian emphasis in knowledge man-

agement stands in an uneasy relationship to management and is to some extent antithetical to it, although the knowledge management authors do not draw this conclusion. There is scepticism about hard-core, technocratic approaches to knowledge management (Scarbrough, 1996; Swan et al., 1999).

Knowledge Management as Enacted Blueprints

This type of knowledge management shares the orchestrated character of knowledge management as normative control, but attempts to engineer and control individuals closer to the behavioural level, rather than values and ideas. The idea behind normative control is, of course, that the 'right' values or interpretations will produce the correct line of action. In this form, knowledge management – much like assembly lines – provide templates and guidelines that produce the wanted action, regardless of what that agent values and thinks.

Hansen et al. (1999), for example, claim that strategies for knowledge management can be implemented in at least two ways: through *codification* or through *personalization*. The personalization strategy, which relies heavily on socialization, draws upon the idea of normative control. Codification, on the other hand, put more emphasis on behavioural aspects and attempts to exploit the promises of information technology. Here, 'the strategy centres on the computer. Knowledge is carefully codified and stored in databases, where it can be accessed and used easily by anyone in the company' (Hansen et al., 1999, p. 107). The idea is that organizational knowledge can be extracted from individuals and converted into databases. The stored knowledge provides templates for thinking as well as action, thus making relatively unskilled workers productive on a higher skill-level more or less instantaneously. As Hansen et al. point out, the idea of codification is typically motivated by an economics of reuse, where organizational members are encouraged/forced to reuse codified knowledge, rather than develop new solutions/knowledge. This means that organizations can gain leverage from relatively unskilled – and cheaper – workers.

There are several similarities between this type of knowledge management approach and classical scientific management: it includes emphasis on efficiency, deskilling processes, and a redistribution of power from 'users' to 'designers'. There are also important differences. First, knowledge management, as enacted blueprints, targets intellectual work. It is not an attempt to make the most out of workers physically, but rather to standardize and simplify – possibly trivialize – the amount of intellectual knowledge necessary for carrying out various tasks. Second, knowledge management as enacted blueprints produces ambiguous status and power effects since, on the one hand, it deskills the worker, who doesn't need to have certain qualifications to carry out the task. On the other hand, it empowers the worker, who is now capable of doing things that previously were out of reach or were difficult to accomplish. Knowledge management as enacted blueprints 'blackboxes' knowledge, thus simultaneously trivializing and mystifying it, yet also democratizes it.

What is managed then, when knowledge management is implemented in organizations? We will dedicate the rest of the paper to sketch an answer to that question. Our arguments are mainly theoretical, but we will also draw on a case study that we are currently conducting on a large consultancy organization. The case is used mainly for illustrative purposes but we also draw upon it in order to support our viewpoints.

KNOWLEDGE MANAGEMENT IN 'EXCELLENCE': AN EMPIRICAL ILLUSTRATION

Excellence Inc. is a large international consulting company. The Swedish subsidiary, which is the primary object of study, employs several hundred people. Excellence is profitable and growing rapidly. It also has a rather high employee turnover, something it shares with almost everybody else in this business sector. It mainly recruits graduates in engineering and business from the universities. The medium age is well below 30, meaning that the majority of the employees are fairly inexperienced.

Knowledge Management in Practice: The Extended Library

From the point of view of the knowledge management officers the reason for knowledge management is simple and straightforward:

> The accumulation of experiences is one of the advantages of being a large consultancy company and we are trying to take advantage of this in a way that makes it less dependent on individuals. We try to make sure that the knowledge is less tightly coupled to individuals: that individual consultants are persuaded to share their experiences and knowledge for the common good.

More specifically the governance and support of the knowledge management system have several, overlapping, functions, including the ability to be able to use earlier results to save time. One interesting, although perhaps less frequently made explicit idea behind knowledge management, is to compensate for the limited experience and competence of the personnel. As the senior knowledge management specialist says:

> Many are here directly from school. So it is necessary to support them, with an easily accessible knowledge capital. It is a competitive advantage as well. A 27 year old consultant is cheaper than a 45 year old one.

The idea is to 'methodify' and, to some extent, 'routinize' many of the key processes of delivering a project to a customer. Knowledge management means transforming experience to method. The further development is to:

> create databases that will control the behaviour at certain, specified times, so that it will be possible to get expert aid, wherever you are.

Technically speaking, the knowledge management system at Excellence consists of several databases and websites organized around what Excellence labels competence groups and knowledge champions. A competence group is roughly a group of consultants, organized around a theme (for example database management or organization design), that gathers regularly and exchanges experiences about the theme. Each consultant is encouraged to take part in at least one of them (it is possible, even common, to participate in several competence groups). Competence groups make sure that the information and the cases in the databases are updated. However, everybody within the company can use the databases. Knowledge champions are people who are designated to systematize the knowledge yielded in projects. Typically, this means that one person has its workload extended with one

more duty in the margin, and our informants tell us that this function is the most likely to be dropped if the schedule gets tight. Nevertheless, most pointed to the relative value of having knowledge champions within projects. To sum up, knowledge management is based on the economies of scale and scope that sufficiently large consultancy companies create in terms of experience and knowledge. Thus, knowledge management primarily consists of highly structured and easily accessible codified experience, stored in databases and accessed through the company-wide computer network.

Extending Knowledge Management: From Extended Library to Community and Provider of Cultural Cues

Since knowledge management has a quite high profile within the company, most consultants have a fairly elaborate conception of it. However, they tend to enlarge the meaning of knowledge management, compared with knowledge management managers:

> Knowledge management has three aspects. First, it makes me aware that there are enormous amounts of information that I know can be useful for me, stored in databases in a relatively structured way. Second, I am part of it and consciously contribute to extend this mass of knowledge. And you do that, not because you are forced to, but in a natural way through the processes that are constructed for it. Third, I know that I can approach anyone in the company and ask a question without the risk of being denied help. Everybody is there for each other.

The dominant conception, that knowledge management is codified experiences and information stored in databases and accessible for everyone, is in some cases almost inverted as when the term knowledge management is used in this very broad way:

> There is not one single day here, when you meet people, when you are not exchanging ideas. That's not codified [in databases] but it still involves the exchange of information and experiences.

This broad conception of knowledge management is, while not dominant or typical, not unusual. Here it is the informal, everyday based exchange of ideas mainly amongst people who are being physically close to each other that is important in 'knowledge management'. This general enlargement of the meaning of the concept may have a technical explanation. People in the organization often find it difficult and messy to work with the databases. The databases were typically considered to contain a lot of useful information, but this information was also considered to be hard to extract. As one of our informants put it:

> It is not difficult [to publish material in the knowledge management system]. The problem is rather that the procedures for uploading information are weak. So when you search the databases you often get 1000 hits with varying degree of relevance.

The same informant also points out that the technology often is more helpful for communication than for information retrieval. In the end, the actual substance in

the systems seems less significant, although in some cases it is perceived as very helpful. To a high degree it is rather their symbolic value that brings meaning to the knowledge management systems. The technology is important, but more as a powerful symbol for the cutting edge quality of the company, than for any substantial reasons – a powerful symbol that also manages to communicate significant cues about the workplace culture. Knowledge management tells me how to operate in this environment: I use what is already there. I contribute with what I know. And I am allowed to interfere with questions, because we share. The way knowledge management is implemented at Excellence may not be the only thing that provides such cultural cues, but it at least operates as an integrative mechanism for cultural messages of this kind. Knowledge management is a technical system, but also a powerful organizational symbol. It stands for community, the expectation that people throughout this large, international company belong to the same tribe and that each one supports each other. As one consultant says, 'knowledge management consists of . . . tools . . . to provide a common understanding'.

This points, of course, even more directly to the role knowledge management appears to play in providing cultural cues: in informing consumers/consultants/co-workers how to operate together, to provide stability when structures are forever changing, and, ultimately, to operate as a tool for common understanding. Thus, while consultants acknowledge that knowledge management includes databases and computer networks, they tend to emphasize the way 'knowledge management' provides cultural guidance. Interestingly, but perhaps not surprisingly, what knowledge management managers see as the biggest dilemma with knowledge management – the sharing of knowledge – is what consultants appreciate the most. Behind the paradox lies highly different ideas of what knowledge management may mean as well as very different ways of sharing: to tediously formalize one's experiences and learning for an abstract system is one thing, to respond to a fellow corporate member that needs help is another.

Work at Excellence is marked by indicators that strongly suggest that managerial intervention generally operates in the control mode. It is a fairly hierarchical company. It claims to be élitist, and employ only the best students from better universities. It is careerist, using up-or-out as *the* model for the normal career. It is team-oriented, providing scarce space for idiosyncratic behaviour. Work routines and methodologies are highly specific and formalized. Members are expected to follow corporate methodology and to document studies and presentations in a prescribed format. The dress code is strict, uniform and obeyed. As a company, it is replete with evaluations, judgements, performance feedback and measurement of the individual member. Excellence is a managed company, where managerial expertise is held in high regard and exercised as often as possible. Employees talk uniformly of a very strong 'delivery culture'.

Knowledge management facilitates the manifestation and enforcement norms of sharing and documenting cases and experiences. Knowledge management makes the expectation of sharing more manifest through providing a company-wide system for publishing experiences, thus making them more accessible. It makes it possible for people to contact persons with expertise on a specific subject and expresses the expectation of providing knowledge support. It enhances a 'sharing culture', since knowledge management as a system has high visibility in

the company. It makes it possible to enforce the norm, since the system makes it quite easy to find out how much each member contributes to the system.

In this somewhat modest sense we can talk about knowledge management as an element for normative control at Excellence. Moreover, the usefulness of knowledge management in this respect is likely to be exploited by management at Excellence on a larger scale. Given the clearly demonstrated belief in the value of management, and management systems, it is actually hard to imagine how Excellence could possibly avoid letting knowledge management play a significant role in the exercise of normative control.

However, there are circumstances at Excellence that makes knowledge management less effective as an instrument for normative control. The company is mainly organized based on project assignments and, as these vary heavily, there is considerable variation in how knowledge management matters enter. Senior managers are actually rather invisible to the majority of the personnel as they are mainly preoccupied with customer contacts. Knowledge management is not seen as very effective, helpful or relevant by some and this does not appear to be an illegitimate opinion. The inclination to update and use the knowledge management system seems to vary between individuals, groups and departments. Even in cases where knowledge management may have been efficiently organized and operated – our material indicates that there at least are some 'pockets' within the organization where knowledge management is deemed as a great success – it seems to have little integration with other systems for control, such as individual, project and financial performance evaluation systems. Thus members may quite easily resist and disregard norms manifested through the knowledge management system. The sheer variety of material in the knowledge management system also makes it quite possible for members to construct areas of relative freedom where they can exercise their judgement autonomously.

In Excellence, the relationship between knowledge and management is thus far from clear-cut. There is an ambitious knowledge management system, to which considerable resources are allocated, but on the whole it is up to the employees to what extent they will use it. The fairly broad cultural norm and expectation of knowledge sharing – meaning that people to some extent can also rely on people in foreign subsidiaries being prepared to help when asked – is a mix of broadly distributed orientations that have emerged over time and outcomes of various managerial arrangements, such as homogeneous recruitment and promotion patterns and a broadly similar project methodology. The symbolic significance of the knowledge management system is important. But the impact of management here is restricted to encourage an inclination to ask for and share experiences, and does not directly address knowledge per se. This impact is partly indirect, via other arrangements such as HRM and the extended library, and is not so much focusing on the persuasive communication of the appropriate values and norms.

The way knowledge management is used at Excellence is interesting because it seems to suggest that knowledge management is difficult to implement in a way that makes the 'management' part of the concept meaningful. Rather than operating as a managerial tool, knowledge management at Excellence appears to be a resource for individuals and a vehicle for communicating cultural clues. There are several reasons to think that this is indicative for a general pattern, and not idiosyncratic for our particular case. This is the topic of the next section.

THE ODD COUPLING OF KNOWLEDGE AND MANAGEMENT

It is debatable to what extent various forms of knowledge management are best – or even reasonably well – represented by the concepts of knowledge and management. We have argued above against the temptation to reduce the knowledge phenomenon into simple sets of distinctions. Knowledge is a concept far too loose, ambiguous, and rich, and pointing in far too many directions simultaneously to be neatly organized, co-ordinated, and controlled. Given the complexities, tacitness and 'dispersed presence' of the knowledge phenomenon there is a tension between knowledge and management. Given the problems with objectivity and functionality of knowledge, pointed out above, there is for example the need for constant discussions, reflections, questioning and debating of what is 'valid' and how knowledge can – as a resource – be transformed into knowing in specific, non-standardized situations. All this goes beyond what management, as structural, behavioural or normative control, may deal with.

An illustrative example is Leonard and Sensiper (1998, p. 117) who say, in the context of divergence and innovation, that 'it is the tacit dimensions of their knowledge bases that make such individuals especially valuable contributors to group projects; perspectives based on such knowledge cannot be obtained any other way except through interaction'. They also talk about 'taken for granted collective tacit knowledge' and of how communities of practice 'develop implicit ways of working and learning together' (p. 122). But when they move over to write about 'managerial implications' these insights tend to be less significant. Leonard and Sensiper suggest that managers 'can calibrate the level of divergent thinking that they can encourage by varying the number and disparity of tacit knowledge bases brought to bear on the task' and creating collective tacit knowledge through creating guiding visions and shared experiences such as trips to customer sites and deliberate apprenticeship. The problem is that managers can only calibrate what they understand well – mixing people in terms of, for example, age, sex, education and ethnicity may not be sufficient, although staffing may be partly based on assessment of people's personal and cognitive style. Vision talk and common experiences following from trips to customer sites may be weak and superficial measures to create something shared in relationship to all tacit and more or less idiosyncratic knowledge contingent upon work experiences. The emphasis on the tacit would imply a downplaying of the role and options of management in terms of its ability to interfere with knowledge beyond creating good preconditions, such as allocating resources and facilities for knowledge-promoting interaction such as the development of a shared framework and exchange of ideas and experiences (Davenport and Prusak, 1998; Swan et al., 1999).

Management in the control mode operates in such a fashion that it is bound to have a tension-riddled relationship with knowledge and, in particular, knowledge creation. Technocratic and socioideological types of management will, we claim, *streamline* knowledge production and *trivialize* knowledge. As argued above, managers can only calibrate what they understand well. In the control mode, management as a field of expertise provides both particular methods of calibration and a particular understanding of what constitutes successful calibration. Streamlining means to eliminate 'waste' or 'inefficiencies'. This means, for example, to eliminate slack and redundant categories of, for example, competencies and personnel. Technocratic and socioideological management is assumed to provide

efficient production of the goods and services. However, most research on innovation and knowledge creation points towards the importance of loosely coupled systems, slack and functional redundancy (cf. Nonaka, 1994; Spender, 1996b). It is more than likely that technocratic and socioideological types of management will drive out requisites for knowledge creation and consequently hamper rather than facilitate knowledge creation. As mentioned above, the whole point with technocratic and socioideological types of management is to increase the efficiency of transforming inputs to outputs. One spectacularly successful way of doing this is to engineer tasks in as simple forms as possible. As Taylor and other proponents of scientific management demonstrated, this has two particular effects. First, you need less effort to accomplish the task. Second, you can use less skilled workers. The flipside of the coin is also twofold, and particularly damaging from a knowledge point of view. First, in simplifying tasks, you will not only increase efficiency but also reduce complexity, nuance, and subtlety – thus also as per definition substituting/reducing understanding. An effect is the trivialization of knowledge. Consequently, it could be argued that a loss of knowledge occurs rather than a gain. Second, by simplifying tasks, knowledge thresholds would be lowered. Thus, the technocratic and socio-ideological types of management are predisposed to operate in a way that eliminates and substitutes knowledge, rather than maintaining and creating it.

It could be argued that the concept of knowledge management either is an oxymoron (when management operates in technocratic mode) or misleading (when management is of the clerical or communal type and thus primarily a matter of administration). We have already addressed the oxymoronic qualities. The misleading qualities come from the fact that administration appears to play a rather insignificant role in, for example, knowledge creation and knowledge dispersion, relative to other processes and phenomena. The concept of knowledge management assumes, and subtly suggests in its very construction, that management may facilitate knowledge creation, maintenance and dispersion. However, it seems clear that group-level cultural and social-psychological processes that extend beyond the scope of the clerical and communal types of management have greater impact and significance.

A major problem from a management point of view is thus that it is difficult to penetrate and control knowledge. When management enters at full scale, 'knowledge' is turned into information or into social relations at best facilitating co-operative orientations, including knowledge sharing. The first element is recognized in the literature. One author remarks that:

> The great trap in knowledge management is using information management tools and concepts to design knowledge management systems. (McDermott, 1999, p. 104)

One may well argue that another trap is that the design of 'knowledge management systems' also falls short of the expectation of capturing 'knowledge'. Furthermore, it may carry unfortunate connotations and thus represent a trap for the development of the harmonious relationships seen as central for knowledge sharing. At Unilever, for example, the company deliberately avoids using the term management in this context as it is seen as directing attention in the wrong way (von Krogh, 1998). We can hardly talk about knowledge administration

either, but administrative arrangements that facilitate knowledge work still make sense.

Realizing the academic sins (one-sidedness of the virtues) of scepticism, negativity and looking at ideas in an intellectual rather than practical context, a more positive evaluation is, of course, also possible. Knowledge and knowledge management can, then, be seen as (potentially) productive metaphors in practitioner contexts, as they may inspire people to think about companies in, for them, different ways. It may function as a mantra – as auto-communication – people in an organization remind themselves of a particular way of viewing things (Broms and Gahmberg, 1983). The word knowledge has some virtues, as it tends to go against hierarchy and authority based on formal position. In this sense it is anti-managerialist, which is not bad in a society characterized by the ideology and practices of managerialism (Alvesson and Willmott, 1996; Deetz, 1992). The use of the knowledge vocabulary may also, provided that the term knowledge is not watered down too much, counteract a narrow technical focus on data management. Of course, there is nothing inherently positive about knowledge talk (except for academics having stakes in it), and all vocabularies can be used for any kind of purpose or lead to any kind of consequences. Knowledge management talks may encourage reification and trivialization of knowledge – as in ideas of 'storing' it or defining everything, and nothing, as knowledge. Nevertheless, knowledge may have a greater potential for supporting the space for thinking, creativity and the sharing of ideas and experiences, than many other buzz-words in management.

CONCLUSION

Most researchers, as well as their informants, seem to have problems in specifying and making explicit what they refer to as knowledge and as ways of knowing. As a paradoxical contrast, most knowledge management researchers report little doubt about the capabilities of the knowledge management system, *either* to access tacit knowledge sufficiently well for systematic and managed improvement of the company through making it explicit, *or* to zoom in on, and so improve, activities and relations around 'knowledge in itself', such as idea sharing or social support. In other words, we don't know very much about 'knowledge', but we know how to manage it!

Authors on knowledge management are generally aware of the fad and fashion syndrome, but are often convinced that we are dealing with a 'beyond the fad' theme. It is easy to agree with Davenport and Prusak (1998) that 'knowledge' refers to something basic, irreducible and vital to performance, productivity and innovation. But similar things have been said about, for example, corporate culture and at present, and in parallel to knowledge management, about organizational identity (and about leadership, strategy, commitment, quality . . .). Given Davenport and Prusak's, Blackler's and others' very broad definitions (partly quoted earlier in this paper), knowledge is of course fundamental, but something that captures almost everything is not necessarily very useful, neither theoretically nor practically. An interesting irony is that knowledge management probably has a strong rhetorical appeal because of the promise to manage knowledge, at the same time as the point of using the term knowledge is to indicate something that cannot be managed. This irony prevails at least if management does not mean 'anything',

but refers to the capacity to have an influence based on a superior organizational position, and if knowledge partly draws attention to influence based on qualified judgement and insight associated with expertise.

Knowledge management as a concept is thus threatened by falling into pieces if both the two ingredients are taken too seriously. Much of the literature turns knowledge into information or social relations and/or turns management into administration, networking or organizational culture. Knowledge management is, however, obviously an attractive label. As such it can have some positive effects in rejuvenating constellations in fields such as expertise, organizational learning, information technology, and also in inspiring rethinking aspects of organizations through the concept of knowledge. This is positive, but we think that some scepticism to the very idea of knowledge management is motivated and that caution is called for against the risk of recycling old ideas through relabelling key terms.

The 'overlap' between knowledge management and organizational learning, and information management, has been noted in the literature. But many versions of knowledge management come close to organizational culture. So too is the case for knowledge management authors that emphasize the social nature of knowledge and the significance of social relations that support knowledge, while realizing the impossibility of accessing (tacit) knowledge from above or the outside. Some researchers stress the intimate link between organizational culture and knowledge management, in the sense that culture is an important precondition, and constraint, for knowledge management. Initiatives regarding knowledge are not something that can be planned or imposed, but must be fine-tuned in accordance with cultures and social practices. According to Sarvary (1999) 'the few knowledge management systems that act as benchmarks in the industry (e.g., those of McKinsey and Ernst & Young) evolved naturally from the firms' cultures and processes and it is not clear whether they can (or should) be replicated by others' (p. 106). The concept of culture can, however, be carried even further and be seen as the very core of social knowledge processes. Understanding knowledge, not as objective facts and causal explanations, but as a situated, community-based set of meanings, may bring the epistemological outlook in knowledge management more up-to-date. Drawing on cultural studies of organizations may also make it possible to use a variety of insights regarding problems in managing/engineering the subtleties of corporate life (meaning as well as knowledge), to appreciate sub-cultural differences and to go beyond the 'harmony view' suggested by much community-vocabulary. It may also make it possible to be somewhat more open to the power and politics aspects of cultural meaning (Alvesson, 2001a; Martin and Meyerson, 1988).

While underscoring the contradictions of knowledge and management, and consequently downplaying the role of management (as conventionally understood) in relationship to knowledge, we don't want to deny senior persons a role in influencing issues of knowledge. As visible and high-status subjects, senior managers are often in a comparatively strong position to influence how people develop ideas, solve problems, adapt frameworks, give priority to certain tasks and construct certain kind of social relations and experiences of community. In this instance, managers function as senior members in a community, rather than as representatives of a formal hierarchy. Of course, these positions may co-exist and, up to a point, support each other. Without understanding, interaction and legitimacy,

management becomes de-coupled from knowledge issues and may deal with information, resource allocation, HRM, output control and other themes in which one does not have to bother that much about knowledge in any distinct sense.

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