



# The knowledge dimension of innovation management

Theodora Asimakou<sup>1</sup>

<sup>1</sup>Postgraduate Programmes, Business School, IST Studies, Athens, Greece

Correspondence: Theodora Asimakou,  
Postgraduate Programmes, Business School,  
IST Studies, 72 Pireos Street, Athens 183 46,  
Greece.  
Tel: +30210 4822222

## Abstract

The paper critically examines the literature of innovation management – the assumptions and the limitations of each dominant approach. The paper suggests that innovation management theorists have been late to embrace the theoretical progress of the knowledge management field. It seems that even though in theory knowledge management studies knowledge creation and sharing, in practice knowledge and innovation literatures do not communicate. It is argued here that the main limitations of the mainstream innovation approaches spring from that they treat knowledge as a de-contextualised object, transferable and controllable in best cases – at worst, the models focus on managing the processes, ignoring that these are there to support knowledge, hence knowledge should be the main focus of study. Knowledge studies in organisations have opened up ways of understanding knowledge phenomena from different perspectives, and their insights compliment the limitations that innovation studies have met. The paper concludes with a discussion of alternative approaches to innovation management, which succeeded in embracing insights from the knowledge literature in their analysis.

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## Introduction

Sociology of science, postmodernism, as well as work done from ethnomethodological and symbolic interactionist perspectives have challenged the abstract, cognitive and de-contextualised view of knowledge, and have pointed out the close tie between knowledge and context – be it culture, structure, etc. (Detlor *et al.*, 2006).

Notably, Blackler (1993, p. 864) summarises the work done on knowledge in organisations from different perspectives: ‘knowledge has been described as: socially constructed (Berger & Luckmann, 1966); often tacit (Polanyi, 1967); a function of the play of other meanings (Derrida, 1978); enacted (Weick, 1979); distributed (Hutchins, 1983); situated (Suchman, 1987); material, as well as mental and social (Latour, 1987); resilient, but provisional and developing (Unger, 1987); public and rhetorical (Vattimo, 1988); and acquired through participation in communities of practice (Lave & Wenger, 1991)’. All these definitions have a common ground, that is, they suggest an expansion of the dominant rational-cognitive understanding of knowledge, by emphasising the complexity of tacit skills and practice, as well as the significance of social processes, cultural categories and language in ‘creating’ knowledge. The narrow understanding of scientific-abstract knowledge expands and breaks the conventional

distinction between people and technologies (Blackler, 1995), and the narrative and tacit dimension of knowledge, together with the contextual factors (structures, culture) that support knowledge processes, are gaining some attention.

In spite of the conceptual developments in understanding knowledge phenomena in organisations, the innovation literature is still dominated by the rational-cognitivist discourse, which asserts the controllability and manageability of innovation processes or environment, neglecting the complex nature of knowledge so much, as the porous and conflictual nature of organisations and communities who are supposed to engage in the process. This paper suggests that the innovation literature and practices would gain a greater understanding of their limitations and weaknesses by embracing insights from the recent developments in the knowledge management studies (Chatzkel, 2007; Plessis, 2007).

The paper consists of four parts. In the first part, the developments of the knowledge management discourse are discussed, that is, the rational-cognitivist view and the alternative ways of understanding knowledge in organisations. Then, a discussion of the innovation management, the core themes of the debate and dominant assumptions is presented. In the third part, criticisms are addressed to the dominant innovation models based on the insights gained by the wider debate on knowledge in organisations. The penultimate section discusses two alternative approaches to innovation management, which successfully address in their analysis the complexity of knowledge and the political nature of the related processes. Finally, the paper concludes by underlying the theoretical and applied possibilities that insights from knowledge management could offer for innovation studies.

### Knowledge in organisations

The debate of knowledge in organisations has come a long way, and has resulted in a variety of arguments and practices. Its roots are found in philosophy, which traditionally distinguishes three types of knowledge: 'knowing how', which refers to the skills one develops, and is most of the times tacit; propositional knowledge or 'knowing that', which resembles information, since it is de-contextualised (this has been the main object of philosophical thinking); and 'knowing things', which is the knowledge of acquaintance. These two last forms of knowledge are more explicit, in the sense that they can be described verbally (Ryle, 1949; Polanyi, 1967). Specifically, Polanyi argued that knowledge has two dimensions, the tacit and the explicit, and the difference between the two lies in the ability to articulate what we know: the explicit dimension refers to knowledge that can be verbally articulated and hence represented semantically or symbolically. This last remark fuelled the debate across approaches and paradigms in organisational studies.

Following Polanyi, Collins (1993) talked about the embrained, the embodied and the codified types of knowledge. The embrained (cognitive) and the embodied (competences) knowledge lie in the individual, whereas the codified knowledge is impersonal and lies in the physical environment. Collins adds here a new site of knowledge, that is, society; this refers to the cultural knowledge that dictates rules on how to perform certain actions successfully, or rather in a socially accepted manner. One can argue that encoded knowledge is part of the encultured knowledge of a community; however, here the distinction is made that encoded knowledge has been 'extracted' from the community or individuals and placed in the physical environment (stored in an object, e.g. book, floppy disks, etc.).

Embracing the arguments of philosophy and sociology, the debate about knowledge in organisation has led to a number of conceptual and applied approaches. These predominantly seek to control and manage it, whereas others take a more critical view and doubt this possibility. Sørensen & Kakihara (2001) bring some order in the field by distinguishing four main discourses that shape the thinking and practices of knowledge management. The discourses are distinguished in terms of their views on knowledge as follows: (a) knowledge as object, (b) knowledge as interpretation, (c) knowledge as process, and (d) knowledge as relationship.

The first discourse treats *knowledge as object*, that is, an entity that exists independently and in humans' mind – embrained knowledge – that can be managed. From this perspective, knowledge is a representation of a 'real', pre-given world, the outcome of humans' cognitive ability to process information. Knowledge is another 'asset' – such as money, land, and labour that an organisation possesses – objectified and transferable within and among organisations (Sveiby, 1997; Boisot, 1998). The aim of knowledge management is to 'discover' and 'transfer' this knowledge to storing databases. This paradigm, which has its roots in positivist thinking, has informed a very 'rigid' and de-contextualised image of knowledge, which led the practitioners to perceive knowledge management as an improved version of technology management. Furthermore, its key assumptions have also shaped the theories and practices of innovation management.

The second discourse on *knowledge as interpretation* is based on a socially constructed view of the world (Blackler, 1993; Boland & Tenkasi, 1995; Tsoukas, 2001). From this perspective, the world as we 'live' in it is an organised abstraction of a 'brute' reality of sensed experience (Chia, 1997). 'Reality' is constructed through the process of ascribing meaning to phenomena, and these meanings are attributed according to the system of codification – that is, language – that has structured the thinking of each community. The discourse of knowledge as interpretation focuses on the humans' mutual interpretative acts, which are shaped by, and simultaneously constitute, knowledge within a community. It recognises that knowledge depends on the individuals' 'point of

view', and the interpretative actions and linguistic behaviour of the members of each community (Tsoukas, 1996). 'Knowledge as interpretation' raised awareness of the importance of communication, and the role of language and the varieties of ways in which people talk; these are seen as vehicles of knowledge and catalysts in the process of knowing (Orr, 1990; Nonaka, 1994; Nonaka & Takeuchi, 1995).

The discourse on *knowledge as process* is based on the ontology of 'becoming' (Bergson, 1913) and has been framed mainly in the field of organisational learning (Senge *et al.*, 1999). From this perspective, the world is not static but rather in continuous transformation. Seeing the world as 'outcome' and unchangeable facilitates its conceptualisation, which relies on static categories that the language provides; however, it only allows the understanding of the phenomena as 'snapshots' of an ever-changing 'reality' (Chia, 1997). The discourse views knowledge as a complex of processes that humans apply to make sense of the world and reality (Daft & Weick, 1984; Weick, 1985). From this respect, knowing – rather than knowledge – is part of humans' actions and interactions (Cook & Brown, 1999). 'Knowing' bridges individuals' beliefs with the 'truth' of the external world viewed as a whole. This discourse has moved the focus of the debate from the technologies to the centrality of humans in these processes, and has become the most influential discourse among those who want to avoid the static, cause–effect view of knowledge as 'object'.

The last discourse sees *knowledge as relationship*. According to this view, knowledge is always relational to the surrounding world. It is a result of human mental acts, be it individual, group or social acts; those acts depend on the socio-cultural surrounding. These human mental and linguistic acts shape continuously the world of experience and can induce new contextual drifts to the world (Berger & Luckmann, 1966). This discourse is similar to the interpretative one; however, it emphasises the context and network of relations that allow the creation of knowledge. From this respect, knowledge is an 'interconnected web of relationships', in which human interpretative acts ceaselessly shape and maintain, intentionally and unintentionally, the relational setting of the web and the contextual disposition of social reality. Knowledge is always perceived as relational to a web of other 'knowledges'. In knowledge management, this discourse has drawn attention to the web in which people and organisations are related to and 'do the knowing' with (Brown & Duguid, 1991; Lave & Wenger, 1991). Issues of intranet, internet and organisational structures are central to these approaches to knowledge in organisations; for them the question of knowledge is not deployed around what knowledge an organisation has, but with what set of relationships the organisation is connected.

Nevertheless, most of the research assumes the collaboration and the trust developed between people in the same organisation or network, and suggestions aim to

resolve managers', instead of organisational, problems. Exceptionally, Blackler (1995) quite early emphasised the need to refocus on questions regarding knowledge phenomena in organisations, and to expand the agenda to include the workers' interests – and considering contemporary societal expectations, possibly environmental and communities interests, too. Drawing from work done from a community perspective, that is, work that emphasises 'knowledge' as collective, situated and developed through people's construction of shared experiences and through their perceptions of their activities, he suggests 'activity theory' for analysing knowledge processes in organisations. From this perspective, knowing is a contested praxis, and reflects the structures of power and emerging conflicts between groups, as the discourse on 'knowledge' transforms the social order and forms new roles and identities. This area – the power/knowledge theme – is less addressed from current research in knowledge phenomena.

### **Innovation management approaches**

After World War II, robust technological progress and economic growth drove economists to study the relationship between investments in science and technology, and economic growth. However, this approach was insufficient to answer how technological progress exactly affects the economic system, because it could not answer why some firms performed better than others. To answer this, there was a need to study the internal characteristics of the innovation process, and how this is related to individuals, management and the wider socio-economic environment. Hence, new approaches placed emphasis on the firm, and in particular on the related managerial activities. Progressively, innovation management is seen as the core of the knowledge firm's strategy (Trott, 1998; Bessant & Tidd, 2007). It is argued here that the research on knowledge in organisations has pointed out the limitations of these new approaches, and that knowledge phenomena are far too complex to be addressed only from a managerialist perspective.

Although an extensive discussion is construed around innovation, there is no clear definition of what innovation is. Wolfe (1994) suggests that the inconsistency arises because researchers study different things conceived under the same name, and in order to clarify the field, he suggests three main themes that current research investigates: (a) the diffusion of innovation, which studies the patterns of diffusion over time and/or space through a population of potential adopter organisations; (b) the organisational innovativeness, which studies the determinants of innovativeness; and (c) the process theory, which studies the processes of innovation within organisations. The field of innovation is indeed multi-disciplined (economics, finance, organisational behaviour, etc.), studied from many different epistemic traditions, and hence characterised by high inconsistency in terms of assumptions and findings.

At the organisational level, which is the focus of the present paper, innovation is studied as a technological problem or an administrative question, a social or a political matter. Slappendel (1996) distinguishes some dominant themes in the literature of innovation, such as the role of entrepreneur, the size of the organisation, the role of technology, and categorises them in terms of their assumptions as: (a) the individualist perspective, which emphasises the entrepreneurial side of innovation, (b) the structuralist perspective, which examines structural characteristics of the organisations, and (c) the interactive, which suggests an integration of the two. Despite the definition and the theme each approach adopts, the key drive of the mainstream research relates so far to how manageable the innovation process is.

Here, the two mainstream approaches to innovation analysis are distinguished: the first sees innovation as a rational planning process, while the second as a cultural issue. After discussing the limitations of the two approaches, two alternative ways of conceiving innovation follow, which are suggested to incorporate insights from the knowledge literature.

#### **Innovation as rational planning**

The first strand, as developed from neoclassic and evolutionary economics, holds that innovation is a prime strategic goal of organisations to be realised through particular organisational functions. Influential authors (Quinn, 1985; Trott, 1998; Brown *et al.*, 2002) suggest that innovation is an entrepreneurship function, essential for the survival of small and bigger organisations. The objective of innovation activities is the development of new products that result from conscious and purposeful search. The environment is recognised as turbulent, fast-changing and unpredictable; hence, the role and activities of R&D departments are closely associated with departments whose role is to scan the market for needs and new product opportunities. The rational planning of innovation process suggests models that tend to split the process into distinct controllable and measurable stages, which involve the evaluation of ideas, the matching of the idea to the market conditions, the elaboration of the idea, the development of the idea into material reality, the technical tests and validation of trials, and the final stage is the launching of the product. At the end of each stage, the idea is evaluated against the market and the profits that are expected to return in a defined (mostly short-term) time, and the compatibility of the idea with the strategic route of the organisation. All these matters are supposed to be arranged and designed in advance, and incorporated in a business plan.

Fonseca (2002) notices that defining sequential models of the innovation process in this way displays systems thinking, and calls for cybernetics systems to use in controlling the process. Innovation is conceived as unfolding what has been enfolded in the design of the system from within it emerges. The difficulty with this approach is that it excludes any possibility of novelty,

since the cause of innovation formation is the system itself. Moving from the macro-level of the market to the micro-intra-organisational level, this approach appeals to the rational, autonomous individual, who chooses the innovation. Here lies the paradox of this approach in that '... by proposing that autonomous individuals choose innovation, in effect putting intention into the system, but also parts of the system, which unfolds what has been put into it: an individual is said to be free to choose but also subject to the operation of the system' (Fonseca, 2002, p. 20). This approach does not address the paradox, but tries to downplay it by suggesting a 'both ... and' explanation; furthermore, neither formative nor rationalist teleology have provided a satisfactory account on how innovation emerges, other than attributing it to the individuals' rational choice.

#### **Innovation as culture**

The discourse has developed from the human relations school and emphasised the significance of values and culture in making innovation blossom. The analysis of innovation from this perspective takes into account how cultural variables, biased decision-making strategies and managerial procedures mediate the processes of creating and sharing knowledge within and across institutions (Quinn, 1985; Kanter, 1988; Nonaka, 1994; Nonaka & Takeuchi, 1995). Specifically, innovation – whether technological, administrative, processes or systems – is defined as uncertain, fragile, political and imperialistic, and furthermore it is suggested that it should flourish where conditions allow flexibility, quick action and intensive care, coalition formation and connectedness. In other words, it determines not only the features of innovation – and the way theorists and practitioners should think about it – but also expands to suggest adequate structure, culture and possible actions.

Kanter (1988) distinguishes four stages in the process: (a) idea generation and activation, where individuals such as 'entrepreneurs' and 'innovators' are seen as driving forces; (b) coalition building and acquisition of power, which is essential to move ideas into reality; (c) idea realisation and innovation production, where ideas are turned into a model; and (d) transfer or diffusion of the spreading model, which is actually the commercialisation stage of innovation. From this respect, knowledge creation is represented as a dialogue between the tacit and the explicit knowledge that individuals in an organisation possess; this knowledge is transferred from the individual to the group level, and hence to the organisational level as individuals and groups or 'communities of interaction' span within the organisation. This interaction among organisational members challenges existing knowledge and fosters the creation of new knowledge (Nonaka, 1994; Nonaka & Takeuchi, 1995).

Responding to the rational planning approach, these stages emphasise the unpredictability of innovation, and the centrality of the innovation heroes (individuals) and of communication and communities in creating new

knowledge. More importantly they highlight the clash between creativity and control in attempts to rationally design the process, while attention is given to the importance of technological means to support these processes. Even though this approach rejects the possibility of controlling the innovation process directly, for at its heart is political and dependent on its social context, it still argues that innovation can be influenced, shaped and supported indirectly by designing and controlling the 'right' environment, which will ultimately lead to the desired performance and outcomes. In other words, this view does not suspend the drive for controlling innovation, rather by acknowledging the political aspects of social life, it suggests an indirect way of achieving it.

Evidently, the approach bears the limitations that the literature on culture management has identified, that is, whether there is one corporate culture, and whether culture can be managed (Smircich, 1983; Meek, 1988). Brown & Duguid (2001) note that it makes no sense to talk about a shared culture that supports the innovation process, since organisations are open, and people interact with individuals and other organisations beyond the boundaries of their own. Finally, the question of power from this perspective is addressed as merely a means of negotiation, and not as the force of creating a new order and rules (Foucault, 1980; Clegg, 1989; Frost & Egri, 1991), excluding from the analysis many aspects of power relations in organisations.

### Insights from the knowledge literature

Either conceived as a 'rational' scientific process or as a 'soft' intuitive human process, the dominant discourses on innovation management conceive the innovation process (from origin, formation, cause and evolution of ideas) in terms of constructs beyond the ordinary experience of interaction between people in local situations; hence, the emergence of novelty becomes an extraordinary experience, connected with very particular instances or factors that cause it (Fonseca, 2002). Both approaches give a linear, cause and effect explanation for creativity and innovation, which fails to capture its complex nature, and creates the belief and objective that innovation can be managed, if all factors (individuals and contexts) are controlled. The paradox that both approaches recognise and try to overcome is that, in the race for gaining a competitive advantage, the orderly and predictable decisions, on which the business rests, rely *and* have to support the unpredictable process of innovation.

Belief in the rational 'choice' creates a second paradox: it describes a situation where all organisations – having the same information – are seeking the same innovations. Organisations are represented as designs of individuals, who acquire a double identity: they are parts of the organisation – hence their actions are controlled by it, and at the same time they exist outside of the organisation – hence they can rationally design and control the system. From this respect, innovation is described as a

rational process, emerging via a designed model and evaluated by its outcomes. Knowledge in this process is treated as an 'object' that results from individuals' cognitive abilities. Research and theories from these paradigms aim to control and manage the unpredictable character of innovation, whereas it is precisely the assumed rationality and power of management that should be questioned and investigated. Firms, in their attempts to create stability either by technologies or new structures, create more and more complexity, which rationalistic models cannot capture (Blackler, 1995; Fonseca, 2002).

Criticism can be addressed not only to the underlying assumptions of the models, but also to the constructs they deploy. Communication has been widely accepted by so much the innovation (especially, by the 'culture' approach), as much as the knowledge literature as crucial for sharing experiences and creating new knowledge. The assumption is that knowledge creation and sharing are feasible through managing the communication process among them. The two processes are represented as an upward spiral which is produced by the interaction between individuals' tacit and explicit knowledge; the spiral, and hence the knowledge span, expands as more individuals participate in it (Nonaka, 1994). The simplicity of the linearity of this assumption to explain knowledge creation and sharing has led to the flourishing of mechanistic approaches, of which the discourse and technologies shape the image of knowledge and innovation, and the actual practices in organisations.

The problem with this view is that it pictures knowledge as an entity that, despite its social character, is formed in individuals' minds. This image is conceptually distinct from the material technologies around which organisations are structured, as well as from the processes of learning (Blackler, 1995). Furthermore, this approach and the related technological practices ignore that (Turati, 1999): first, people know more than they can tell (Polanyi, 1967); and second, it is difficult to recognise what one knows, unless one makes it explicit through language or actions. The complexity of knowledge springs from the assumption that all knowledge is partially tacit and depends on contextual elements – these two points are frequently ignored.

Another obscure point is the assumption that people are willing to share their knowledge openly for the benefit of the organisation. However, in a society where knowledge turns out to be the core resource for the well-being of the organisation, now more than ever knowledge and expertise equal power. Informal structures within organisations are reformed based on the power the 'knowledge-workers' hold (Foucault, 1980). The increasingly influential discourse on knowledge reinforces and legitimises these power relations. Hence, it is difficult to see how people would accept to share unconditionally the most precious resource they hold (Hull, 2000).

This last issue of 'willingness to share knowledge' raises issues regarding the 'whom' with, that is, who is considered to be part of the team/community/organisation. The identity of the community is not constituted merely by the common aim towards which the members are working, but fundamentally by the history, the established processes and its culture. Being an *insider* (Lave & Wenger, 1991) essentially means participating in the knowing processes. These processes are founded and rely greatly upon the trust that the community identity inspires to its members. However, trust is a psychological state, not behaviour (O'Donnell *et al.*, 2000), and it is questionable whether it can be imposed on individuals: rather it develops through time, while new members gain their identity as insiders. The problem then that knowledge-sharing faces is that, in today's porous and boundaryless organisations, what 'community' consists of is seriously questioned. Communities and teams are built to accomplish a certain task and then dissolve, 'communities' that lack history and steady members, lack a steady identity. Members may exchange information, but a great part of knowledge and innovative ideas remains with the individuals.

A final but certainly very important point when considering the nature of knowledge is its political nature – that is, there is no knowledge without the communal agreement that so it is (Lyotard, 1984). This raises the question of who decides what knowledge and innovation are or are needed, and who is the appropriate person to take this decision. This point addresses serious criticisms to the underlying assumptions of the dominant innovation models, that is, that panels from the business, managers or enlightened innovation heroes know better what innovation is needed and how to be supported. To put simply, the dominant managerial rationality does not allow or anticipate the participation of those people who generate the ideas in the decision-making process. This creates the following paradox: the community that generates new knowledge is not the one to validate it as such.

### Alternative approaches to innovation management

It is widely accepted that today's developed economies and societies are based on knowledge creation rather than energy and matter. The traditional mechanistic concepts that measure and calculate the natural world are proved insufficient to study complex relationships, human experiences and cultural issues, which are the substances of knowledge. The process of knowledge creation and sharing needs new approaches and methodologies, which would give up the illusion of rationality and control, and study the emergence and consequences of knowledge phenomena as part of the lifeworld. In response to this call, two alternative approaches emerged: the first suggests the study of innovation as the creation of new meanings in a continuous natural process, while people try to make sense of the environment, communicate and

take actions; the second suggests the analysis of innovation as a game of power and politics.

### Innovation as a social construction of meanings

The first view has embraced the discourse on the collective and situated nature of knowledge (Lave & Wenger, 1991; Blackler, 1995) and an epistemology of 'becoming' (Chia, 1997); from this respect, innovation has already emerged via people's discursive interactions in social institutions, which is a stage prior to the rational models of innovation management (Fonseca, 2002). Then, what the latter provides is a common ground for people to talk about innovation processes. However, the models themselves do not bring the order and controllability that are expected. Organisations are in continuous flux and transformation. Stability is temporarily created, while some meanings are agreed and accepted over others; it needs be stressed that this stability is illusive, since meanings continuously change via discursive interactions. As people interact verbally, miscommunication and persistence in making sense and overcoming the uncertainty and the subsequent anxiety will create new meanings. These new meanings will be materialised in innovations. Innovation, from this respect, is not the final product, but an ongoing process where meanings are created every single moment, and this makes an organisation dynamic and innovative. The evaluation of innovation success in this case would be the timely response of the organisation to environmental challenges.

The view stresses the dialectic nature of innovation, beyond individuals' inspired visions and rational plans, and systems of control and cultural systems. Issues of language and power are inherent in this 'organised system'; language represents the accepted order, thus a shift in language would mean a shift in the legitimate power order and hence upon the organisation. What makes people insist on talking, despite the misunderstandings and the frustration, is precisely the willingness to make sense, the curiosity to understand each other and the trust in each other and their relationship. Through misunderstandings a new meaning emerges, and the new meaning will become innovation. Hence, innovation, that is, the creation and materialisation of ideas, is not an individual and political process, but rather a social process activated by all instances of human discursive interaction. The emergence of new meaning cannot be located at a point in time or space; it can neither be attributed to one particular person – despite the stories that the organisation would create around the contribution of one 'heroic' person (organisations and in general modern cultures like to mythologise individuals, and take examples from their deeds). Ideas do not occur as a direct result from the purposeful search over a perceived problem (innovation is not a problem-solving activity); ideas do not result from sequential processes laid out in advance by the legitimate organisational control systems, or present themselves as already stabilised meanings,

rather they acquire the meaning incrementally through conversations.

Addressing the question of innovation as a construction of meanings reflects the latest development of the debate on the nature of knowledge and social phenomena, as it is presented in the beginning of the paper, and indeed offers insights into the nature of innovation, for it focuses and questions the nature of innovation, instead of management and culture, as the previous approaches do. However, all the approaches so far assume and intentionally aim to create consensus among people in organisations. It seems that a substantial part of the debate on knowledge has invested great hopes in trust between people, and between people and organisations. The question of power is addressed as a variable that can be manipulated, in other words, it takes a very limited view of what power and politics are, and how they impact on the emergence of new knowledge and innovation processes.

### **Innovation as a political process**

Sociology of science has shown that the creation of knowledge is not a moral superior activity, but what is accepted as knowledge is socially constructed; furthermore, who decides what knowledge is and what is not is a key question in the debate on knowledge creation and sharing (Foucault, 1980; Lyotard, 1984; Latour, 1987). These two aspects of knowledge creation suggest that innovation should be studied not only in technical terms, but also essentially as political process, for this analysis would highlight aspects that have been previously neglected.

Frost & Egri (1991) suggest to analyse innovation as a political process, where the establishment or not (acceptance or rejection) of a product or social/administrative practice is the outcome of a power game, and not of its value in terms of utility or profitability, etc. – that is, the criteria that are formed within the current dominant discursive order, and widely accepted for evaluating ideas. The authors provide numerous examples of cases where a superior in utility idea was lost because it did not have the necessary network to support it. In analysing these cases, they combine the literature of power in organisations with organisational change, since innovation is about bringing in something new, and most of the times discarding the old; in other words, innovation is always associated with changing the order of things, and hence the innovation process is a contested process of change. Ultimately, what is understood by ‘innovation’ is the result of a complex interplay of power and politics at many levels – individual, intraorganisational, interorganisational and societal.

From this respect, power is not simply the ability of someone to manipulate and control the behaviour and actions of others, but furthermore it forms the surface and the deep structure of the organisational life. At the surface level, power and politics shape everyday life, the contests and struggles for collaborations; power manifests

itself in the attempts of individuals and groups to exploit the rules and take control of the current order for their own benefit and at the expenses of another group. At the deep structure level, power operates in a subtle and hard to detect ways; it springs from an already contested and agreed order, which is accepted as natural and neutral. This ‘deep-structure’ power shapes and influences – but not necessarily determines – individuals’ choices and actions. This position recognises a degree of freedom for the autonomous individual, who can freely act at the surface level, and challenges the established order and ultimately the deep structure. In other words, there is an interactive relationship between surface and deep structure, and political action (Giddens, 1979; Clegg, 1989). Following this argument, organisational politics involve opportunities (current and embedded) to act, orientation (will and skill) and intention (goals). Hence, the role of human agents as surface actors and as intermediaries between the deep and surface structures impacts on the innovation process.

Viewing innovation as a political game and analysing issues of power and order can be applied not only in examining and questioning organisational actions, but also in challenging the dominant view of what innovation is, that is, the technical view that links innovation and progress tightly, and creates the image that innovation and change are always good. The political analysis of knowledge creation addresses the question of what is defined as ‘good’ and what is rejected as ‘bad’, who decides and who benefits from these decisions, what supports and what stops the change, and what the implications of innovation are. This analysis addresses the technical, social, political and ethical aspects of individual, organisational and social action. Furthermore, this framework, when combined with a discourse analytic approach, gives enriched insights into these issues of power/knowledge (Asimakou, 2008). Such an analytical framework conceptualises the power relations through the lenses of discursive formations, and the discourse of innovation is examined as ‘hard’ scientific formation that expands its influence in taking control over the social and natural world (Foucault, 1971, 1972). An excellent example is the ‘green’ discourse on technology and innovation, an area that has attracted great research interest (Frost & Egri, 1991; Steward & Conway, 1998), since it provides the arena where multiple compatible and conflicting discourses meet and shape actions with severe social and environmental consequences.

### **Conclusions**

The paper discusses the limitations of the dominant innovation management discourse so much in theory as much as in the practices it has led organisations to adopt. It argues that the dominant rational-cognitivist discourses treat knowledge as a controllable asset, of which the value is measured according to the profits made after

the innovation (be it product or process) is launched in the market. The question and difficulty for the practitioners here, in their pursuit for distinct knowledge and hard to imitate innovation, is that they have to invest and support ideas that will return profits in the long run, and they have to negotiate a price for a knowledge 'object', of which nobody can know the value in advance.

Influential models of innovation do not address this problem, and consequently innovation is limited to developments that return immediate and easy to calculate profits. The dominant 'innovation language game' – and hence common understanding – excludes first, long-term and uncertain innovations regarding specific results and their commercial chances, which nevertheless are the ones that suit better the definition of rare and hard to imitate knowledge; and second, small ideas that might have no commercial value and would not generate revenue, but are parts of the organisational everyday life, and hence their existence is crucial in creating stability or supporting the organisational transformation and flexibility. Furthermore, the dominant approaches tend to exclude from the designed innovation system the knowledge workers, who would ultimately use it. Most innovation systems assume that people would naturally use them; however, empirical evidence suggests that most

systems fail to engage their users in a continuous knowledge creation game.

In sum, there are aspects related to the nature of knowledge and organisation that are not and cannot be addressed by rational models. The latter identify variables for the generation of numerous contingency models of innovation; however, they have been criticised for their conceptual and methodological limitations, since quantifiable measures neglect the dynamic aspects of innovation; these are better studied by conceptualising innovation as a process shaped by the interaction between humans and the world, as research on knowledge in organisations suggests. Knowledge is situated, collective, enacted, distributed and developing, and should be studied as such. Knowledge is also public, rhetorical and political – the creation of knowledge is not a moral superior activity, but what is accepted as knowledge is socially constructed; who decides what knowledge is and what is not is a key question when thinking about innovation and knowledge. These two aspects of knowledge creation suggest that innovation should be studied not only in technical terms, but essentially as a political process, for this analysis would highlight aspects that have been neglected so far, and have important implications for designing so much innovation strategy and systems, as much as for policy-making.

## References

- ASIMAKOU T (2008) *Innovation, Knowledge and Power in Organisations*. Routledge, Abingdon.
- BERGER PL and LUCKMANN T (1966) *The Social Construction of Reality*. Doubleday, New York.
- BERGSON H (1913) *An Introduction to Metaphysics*. Macmillan, London.
- BESSANT J and TIDD J (2007) *Innovation and Entrepreneurship*. Wiley and Sons, Chichester.
- BLACKLER F (1993) Knowledge and the theory of organisations: organisations as activity systems and the reframing of management. *Journal of Management Studies* 30(6), 863–884.
- BLACKLER F (1995) Knowledge, knowledge work and organisations: an overview and interpretation. *Organisation Studies* 16(6), 1021–1046.
- BOISOT M (1998) *Knowledge Assets: Securing Competitive Advantage in the Information Economy*. Oxford University Press, New York.
- BOLAND RJ and TENKASI RV (1995) Perspective-making and perspective-taking in communities of knowing. *Organisation Science* 6(4), 350–372.
- BROWN JS and DUGUID P (1991) Organisational learning and communities of practice: towards a unifying view of working, learning and innovation. *Organisation Science* 2(1), 40–57.
- BROWN JS and DUGUID P (2001) Knowledge and organisation: a social-practice perspective. *Organisation Science* 12(2), 198–213.
- BROWN JS, DURCHSLAG S and HAGEL J (2002) Loosening up: how process networks unlock the power of specialization. *McKinsey Quarterly* 2, www.mckinseyquarterly.com (accessed September 2008).
- CHATZKEL J (2007) Conference report 2006 KMWorld conference review. *Journal of Knowledge Management* 11(4), 159–166.
- CHIA R (1997) Thirty years on: from the organisational structures to the organisation of thought. *Organisation Studies* 18(4), 685–707.
- CLEGG S (1989) *Frameworks of Power*. Sage, London.
- COLLINS HM (1993) The structure of knowledge. *Social Research* 60(1), 95–116.
- COOK SDN and BROWN JS (1999) Bridging epistemologies: the generative dance between organisational knowledge and organisational knowing. *Organisation Science* 10(4), 381–400.
- DAFT R and WEICK K (1984) Toward a model of organisations as interpretation systems. *Academy of Management Review* 9(2), 284–295.
- DETLOR B, RUHI U, TUREL O, BERGERON P, CHOO CH, HEATON L and PAQUETTE S (2006) The effect of knowledge management context on knowledge management practices: an empirical investigation. *Electronic Journal of Knowledge Management Practices* 4(2), available at <http://www.ejkm.com/volume-4/v4-i2/v4-i2-art4.htm> (accessed September 2008).
- FONSECA J (2002) *Complexity and Innovation in Organisations*. Routledge, London.
- FOUCAULT M (1971) Orders of discourse. *Social Science Information* 10(2), 7–33.
- FOUCAULT M (1972) *The Archaeology of Knowledge*. Tavistock, London.
- FOUCAULT M (1980) *Power/Knowledge: Selected Interviews and Other Writings 1972–1977*. The Harvester Press, Sussex.
- FROST P and EGRI C (1991) The political process of innovation. *Research in Organisational Behaviour* 13, 229–295.
- GIDDENS A (1979) *Central Problems in Social Theory: Action, Structure and Contradictions in Society*. MacMillan, London.
- HULL R (2000) Knowledge management and the conduct of expert labour. In *Managing Knowledge: Critical Investigations of Work and Learning* (PRICHARD C, HULL R, CHUMER M and WILLMOTT H, Eds), pp 49–68, Macmillan Press, London.
- KANTER RM (1988) When a thousand flowers bloom: structural, collective and social conditions for innovation in organisation. *Research in Organisational Behaviour* 10, 169–211.
- LATOUR B (1987) *Science in Action*. Open University Press, Milton Keynes.
- LAVE J and WENGER E (1991) *Situated Learning: Legitimate Peripheral Participation*. Cambridge University Press, Cambridge.
- LYOTARD J-F (1984) *The Postmodern Condition: A Report on Knowledge*. Manchester University Press, Manchester.
- MEEK L (1988) Organisational culture: origins and weaknesses. *Organisation Studies* 9(4), 453–473.

- NONAKA I (1994) A dynamic theory of organisational knowledge creation. *Organisation Science* 5(1), 14–36.
- NONAKA I and TAKEUCHI H (1995) *The Knowledge Creating Company: How the Japanese Companies Create the Dynamics*. Oxford University Press, Oxford.
- O'DONNELL D, O'REGAN P, COATES B, TURNER T and MCCURTAIN S (2000) Critical appraisal norms in intellectual capital creation: a Habermasian perspective. Paper presented at *Organisational Discourse Conference*, 24–26 July 2000, University of London, UK.
- ORR J (1990) Sharing knowledge, celebrating identity: war stories and community memory in a service culture. In *Collective Remembering* (MIDDLETON D and EDWARDS D, Eds), pp 168–189, Sage, London.
- DU PLESSIS M (2007) The role of knowledge management in innovation. *Journal of Knowledge Management* 11(4), 20–29.
- POLANYI M (1967) *The Tacit Dimension*. Routledge and Kegan Paul, London.
- QUINN JB (1985) Managing innovation: controlled Chaos. *Harvard Business Review* 63(3), 73–84.
- RYLE G (1949) *The Concept of Mind*. Hutchinson's University Library, New York.
- SENGE P, KLEINER A, ROBERTS C, ROSS R, ROTH G and SMITH B (1999) *The Dance of Change: The Challenge of Sustaining Momentum in Learning Organisations. A Fifth Discipline Resource*. Nicholas Brealey, London.
- SLAPPENDEL C (1996) Perspectives on innovation in organisations. *Organisation Studies* 17(1), 107–129.
- SMIRCICH L (1983) Concepts of culture and organisational analysis. *Administrative Science Quarterly* 28(3), 339–358.
- SØRENSEN C and KAKIHARA M (2001) Knowledge discourses and interaction technology. Paper presented at the International Conference on *Managing Knowledge: Conversation and Critiques*, 10–11 April, University of Leicester Management Centre, UK.
- STEWART F and CONWAY S (1998) Situating discourse in environmental innovation networks. *Organisation* 5(4), 479–502.
- SVEIBY KE (1997) *The New Organisational Wealth: Managing and Measuring Knowledge-Based Assets*. Berrett Koehler Inc, San Francisco.
- TROTT P (1998) *Innovation Management and New Products Development*. FT Prentice Hall, Harlow, Essex.
- TSOUKAS H (1996) The Firm as a distributed knowledge system: a constructionist approach. *Strategic Management Journal* 17(Winter Special Issue), 11–25.
- TSOUKAS H (2001) Where does new knowledge come from? Keynote addressed at the International Conference on *Managing Knowledge: Conversations and Critiques*, 10–11 April, Leicester University, UK.
- TURATI C (1999) Beyond myths and serendipity: knowledge as an organisational affair. Paper presented at *15th EGOS Colloquium*, 4–6 July, University of Warwick.
- WEICK K (1985) Cosmos vs. chaos: sense and nonsense in electronic contexts. *Organisational Dynamics* 14(2), 50–64.
- WOLFE R (1994) Organisational Innovation: review, critique, and suggested research directions. *Journal of Management Studies* 31(3), 405–432.