International Journal of Knowledge, Culture and Change Management

Volume 4 Article: MC04-0191-2004

Waiting for the Barbarians

'Knowledge Management' and 'Learning Organisations'

Mary Kalantzis



'Knowledge' and 'Culture': Organisational Intangibles and their Tangible Value
Proceedings from the Management Conference 2004

International Journal of Knowledge, Culture and Change Management

Volume 4





This journal and individual papers published at www.Management-Journal.com a series imprint of the University Press.com

First published in Australia in 2004/2005 by Common Ground Publishing Pty Ltd at www.Management-Journal.com/

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ISSN: 1447-9524 (Print) ISSN: 1447-9575 (Online)

Cover design by Common Ground

The International Journal of Knowledge, Culture and Change Management is a peer-refereed journal published annually. Full papers submitted for publication are refereed by the Associate Editors through an anonymous referee process.

Papers presented at the Fourth International Conference on Knowledge, Culture and Change in Organisations, University of Greenwich in London, United Kingdom, 3-6 August 2004.

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Waiting for the Barbarians

'Knowledge Management' and 'Learning Organisations'

Mary Kalantzis

The great Greek poet CP Cavafy, lived from 1863 to 1933, a tumultuous period in modern history, to be sure. 'Waiting for the Barbarians' is one of his finest poems.

Waiting for the Barbarians

- What are we waiting for, assembled in the forum? The barbarians are due here today?

- Why isn't anything happening in the senate?

Why do the senators sit there without legislating?

Because the barbarians are coming today.

What laws can the senators make now?

Once the barbarians are here, they'll do the legislating.

- Why did our emperor get up so early, and why is he sitting at the city's main gate on his throne, in state, wearing the crown?

Because the barbarians are coming today and the emperor is waiting to receive their leader.

He has even prepared a scroll to give him, replete with titles, with imposing names.

- Why have out two consuls and praetors come out today wearing their embroided, their scarlet togas?

Why have they put on bracelets with so many amethysts, and rings sparkling with magnificent emeralds?

Why are they carrying elegant canes beautifully worked in silver and gold?

Because the barbarians are coming today and things like that dazzle the barbarians.

- Why don't our distinguished orators come forward as usual to make their speeches, say what they have to say?

Because the barbarians are coming today and they're bored by rhetoric and public speaking.

- Why this sudden restlessness, this confusion?

(How serious people's faces have become.)

Why are the streets and squares emptying so rapidly, everyone going home so lost in thought?

Because night has fallen and the barbarians have not come.

And some who have just returned from the border say there are no barbarians any longer.

And now, what is going to happen to us without barbarians?

They were, those people, a kind of solution.

CP Cavafy, 1863-1933 (Bien et al., 2004) pp.2-3.

I have a feeling, and particularly when it comes to the question of knowledge management, or for that matter its cousins knowledge economy and knowledge society, that we are living through another moment of anxiety whose prevailing sensibility is similar to that expressed with such eloquence and subtlety by Cavafy.

Knowledge management is our new barbarism. Its rise coincides with the pervasive spread of the new tools of the so-called information society—first computers and communication systems; then more recently networked information systems and the cacophony of derivatives some of which go by the names of asynchronous messaging, groupware and content management systems. The barbarism here is in the reduction of the human to the mechanical, so naively at times as to think that the battle for the hearts and minds of the citizens will be won with weapons alone. This is surely not the case, no matter how smart their conception and precise their targeting.

More barbaric still is the process of reducing the tacit and implicit to the clearly documented and explicit, as if the specificities of time and place and person can be stripped from experience without doing damage to the knowledge such an endeavour is designed to distil.

Yet like Cavafy's Romans, we often find ourselves entering the dialogue around data and information and knowledge as if we wanted our worst fears to come true. Of course people won't be replaced by machines and the formalised systems of data they require. In fact, I want to argue that in these barbarians there is also a kind of solution. What a relief, these barbarians.

In the midst of change it is possible to be panicked by the scale, urgency and immediacy of the transition, or complacent about trends which seem to be longer term or even simply the re-emergence of perennial dilemmas. Neither is helpful, which is why I find the loose temporal aggregation 'epochal shifts' to be more helpful. Viewed on a timescale of decades, we are at a turning point the shape of which



is not yet fully clear, we are in the midst of one such epochal shift. I will try to give some shape to this shift, and highlight some emerging issues which are symptomatic of those changes.

In our 1997 book Productive Diversity, Bill Cope and I brought together ten years of research into the changing nature of work (Cope and Kalantzis, 1997). We had researched the then much-touted Japanese model, having interviewed the people working in the training divisions of major Japanese corporations. We had conducted numerous research and workplace training projects in major Australian companies as well as public sector and communitybased organisations (Cope and Kalantzis, 1995). We decided that the perspective of the book could be no less than the preceding century of modern work, for it was only on this time scale that the profundity of change could be seen, as well as the pace of change which as glacial in some moments as it was precipitous in others. Some of our colleagues working on the same research agenda were bold enough to call this change the emergence of a 'new work order', and to a substantial degree our research corroborated their view (Gee et al., 1996).

To summarise the 'Productive Diversity' thesis in just a few sentences, we traced the change from 'Fordism' or 'Taylorism' with its fine division of labour, strict hierarchy, mass production/mass consumption dynamics and its mechanical metaphors for structure, to 'Postfordism' with its emphasis on multiskilling, teamwork, 'flattened hierarchy', worker empowerment, with cultural metaphors applied to organisational structure supported by the 'shared values', corporate 'vision' and organisational 'mission'. These contrasts we developed more as an heuristic than a neat chronology, for everywhere we went in our research endeavours we found a kind of uneven development, in which Fordist and Postfordist moments could be identified in almost every workplace.

The purpose of our book however, was to discuss another, emergent epochal shift in which globalisation and civic pluralism challenged the relatively simple nostrums of Postfordism about shared values and the singularity of corporate cultures (Kalantzis, 2001). In the most successful organisations we noticed a fundamental shift in the cultural metaphor from one which was, consciously or unconsciously founded on a communitarian notion of commonality, to one where negotiating diversity was the key dynamic: customising products and services for niche markets, the dynamics of diversity in teams drawn from a globalised labour force, building networks and alliances with other organisations whose occupational cultures were very different and building what were in effect crosscultural collaborations and alliances. Given the profundity of the underlying dynamics of civic pluralism and globalisation, this we felt added up to a 'Productive Diversity', or another epochal shift in

the human dynamics of work. Our notion of 'Productive Diversity' was an unholy mix of realism about our economic trajectory, distressing to some, and an act of strategic agenda-setting, providing others with cause for optimism.

Perhaps the most profound aspect of this shift, first in the direction of Postfordism and then Productive Diversity, was the rise in the relative value and significance of intangibles. Central to these intangibles are the related notions of 'organisational culture' and 'knowledge'. Having already discussed the notion of organisational culture, I will focus for a moment on the notion of organisational and professional knowledge—an interest of mine which as developed since the publication of *Productive Diversity*.

'Knowledge economy', 'knowledge management' and 'knowledge worker' are three buzz-words that are frequently used to describe what is new about contemporary work and productive life (Stewart, 1998). Perhaps these terms are used too easily, too glibly even. However, the term 'knowledge' does point to three key aspects of today's organisations, and today's economy:

Technological: The knowledge economy is heavily dependant on technologies which assist the flow of information—within enterprises, between enterprises and between enterprises and consumers (Castells, 2000; Castells, 2001). Herein lies the primary basis for productivity improvement and competitive advantage. Moreover, these are technologies more infused with human meaning than ever before, their human interfaces drenched with textuality, visual symbology and representational and cultural force (Cope and Kalantzis, 2003).

New Slide

Commercial: In the knowledge economy, the capital value of an enterprise's asset base and the market value of its tradeable products is increasingly located in intangibles—brand, reputation, business systems, customer base, intellectual property, human skills and the capacity of the organisation to capture, systematise, preserve and apply knowledge.

Cultural: Human needs have been transformed to the point where, in the marketplace, consumers focus on representations as much as they do on physical entities—design, aesthetics, concepts, brand associations and service sensibilities (Cope and Kalantzis, 2002).

In some important respects, this simply develops and extends lines of thought that are decades old, be they from the fields of management or social theory. Of all management theorists, Drucker has one of the longest views, in part for the simple reason that he has remained a cogent commentator into a ripe old age (Drucker, 1998; Drucker, 2001). In his 1993 book, *Post-capitalist Society*, he reflects on the change in the following terms:

When I first began to study management, during and immediately after World War II, a manager was defined as 'someone who is responsible for the work of subordinates'. A manager, in other words, was a 'boss', and management was rank and power. ... But by the early 1950s, the definition had already changed to 'a manager is responsible for the performance of people'. Now we know that this also is too narrow a definition. The right definition is 'a manager is responsible for the application and performance of knowledge' (Drucker, 1993).

As for the knowledge that is now the central value at the heart of organisations and contemporary management cultures, there is nothing clear or empirically stable about it. In fact, the organisation was now a place of instability and contest.

The organisation of the post-capitalist society of organisations is a destabiliser. Because its function is to put knowledge to work—on tools, processes and products; on work; on knowledge itself—it must be organised for constant change It must be organised for the systematic abandonment of the established, the customary, the familiar, the comfortable, whether products, services and processes, human and social relationships, skills or organisations themselves. ... [E]very organisation of today has to build into its very structure the management of change. It has to build in organised abandonment of everything it does (Drucker, 1993).

These insights are echoed in social theory, both by the early predictors of the coming of a post-industrial or information society (Bell, 1973; Masuda, 1980) and those who try to account for a new 'reflexive' cognitive, aesthetic and community sensibilities in late modernity (Lash, 1994).

And where there is knowledge and where that knowledge is in such a dramatic state of flux, there must be learning ...

For the past three years, I have been president of the Australian Council of Deans of Education, and there is has been our prime objective to gain political and social traction for education—a profession with traditions as old as any other, whose social significance is as great as any other, and whose knowledge base is as systematic and honourable as any other. Education, however, is very much an poor cousin to the other professions. Our primary aim in the Council has been our aim to raise the profile of the profession and the academic status of those who teach those who aspire to be

teaching professionals. In this regard, the first of the epochal shifts—the changing nature of work—is absolutely on our side. As professionals whose interest is learning, we can only benefit from the acknowledgement that knowledge is an economic force, because knowledge is the stuff of learning and learning is the stuff of knowing how to read, appropriate, create and apply knowledge.

However, by no means does the first epochal shift mean that we are in for an easy run, because this same moment is one that raises profoundly difficult questions about the place of learning and the role of education in its traditional, institutionalised forms. In the lead-up to the 2001 election, I lead the Deans in the development of a charter for what we called 'new learning' (Kalantzis and Cope, 2001). The first of eight propositions put by the Charter was that education was playing a much more significant role in the formation of socially productive persons. However, in a second proposition, we stressed that more and more of this learning would not occur in formal learning settings. Of necessity, given the pace of change and the specifics of context, learning would increasingly need to be lifelong and lifewide.

We are witnessing a series of interlinked changes in education which represent a significant challenge to the historically familiar institutional structures. These changes raise questions as fundamental as what is learnt and where it is best learnt. Will the most important learning still occur in formal institutions, for instance, or will learning increasingly take place in professional, workplace or community contexts? And, in contrast to the general disciplinary learning of educational institutions, might this increasingly be just what is needed, just enough and 'just-in-time'? The changes also raise questions about the historic assumptions about the nature of knowledge—what is disciplinary content? and what is an appropriate level of generality for curriculum? And the corollary of the 'knowledge economy' or 'knowledge nation' discourse is that education would need to be more grounded to social and economic purposes and less often simply 'for the love of learning'. Together, we would call these an epochal shifts in the profession and practice of education, as great as and in parallel to, and related to the shift in the nature of work.

For the purposes of this paper, however, I want to highlight one particularly significant aspect of this shift, and that is a shift in the balance of formal and informal learning (Beckett and Hager, 2002; Eraut, 2000). I want to framed this distinction in the following way:

FORMAL LEARNING

- Deliberate: conscious, systematic and explicit.
- Efficient: structured and goal oriented.
- Exophoric: for and about the 'outside world'.
- Analytical: abstracting, generalising, supracontextual, transferable.

INFORMAL LEARNING

- Amorphous: haphazard and tacit.
- Unorganised: incidental, accidental, roundabout.
- Endogenous: embedded in the lifeworld, and so much so that it is often all-but invisible.
- Organic: contextual, situational (Kalantzis and Cope, 2003).

One particularly important point emerges: given the growing depth of contextual diversity (niche markets, communities of practice, personal and cultural identities—the world of 'productive diversity') and given the quickening pace of technological and social change, the balance of relevant learning is shifting into the informal domain.

This immediately produces a crisis of relevance for the formal domain, for the profession of educators, in fact. Jim Gee, one of the international research team on our 'Multiliteracies' project has recently published a book which asks the provocative question of why learners who hate school (from all socio-economic backgrounds) will spend 50-100 hours playing what is in fact a highly intellectually demanding a video game? He analyses the dynamics of a number of games, from the more benign 'civilisation' simulations to the most aggressive of 'first person shooter' games. Common to all, he concludes is a theory of learning more sophisticated than most formal education settings. This entails: learning which is highly active; learning that recruits, challenges and morphs identity; learning in which navigation paths are made by the player to the extent that the learner becomes an insider and producer, not just 'consumer'; learning which is multimodal, requiring the simultaneous alternative manipulation of image, text, number, icon, artefact, space and sound; learning which is intrinsically critical as the player looks for deception around every corner or even attempts to outwit the game by breaking its rules; learning which is staged, where mastery by levels involves a cycle of introducing challenging new skills followed by practice which makes these automatic and reflexive; learning which encourages risk in an environment of safety where real-world consequences are eliminated or reduced; and learning in which you get better at the game as you come to appreciate its design principles (Gee, 2003).

This is the stuff of sophisticated learning, to be sure, but it is quintessentially learning in the informal domain. More and more of our skills, capacities and knowledge is being gleaned from these areas. This is not just the case for professional and technical knowledge. It is also the case for the interpersonal, cultural and organisational knowledge that was traditionally the preserve of 'the humanities'.

Indeed, not only is there a practical crisis in the domain of formal learning. We are increasingly reaching the realisation that much is wanting in traditional, formal learning. Take, for instance the tricks and tropes of the discourse of formal learning which habitually open opportunities for some kinds of people and close them for others (Bernstein, 1971), and which defy the range of human 'intelligences' (Gardner, 2002) which can fruitfully

be brought to bear on a situation. Or the kinds of limited instrumental rationality and naive positivism that surround the disciplinary discourses of traditional schooled knowledge.

I have been arguing that, for a variety of general reasons relating to epochal shifts in the nature of work and the place of education in society, the informal domain of learning is becoming more significant. And more importantly perhaps, both the domains of informal and formal learning will acquire some of each other's more cogent attributes.

The literature on 'knowledge management' supplies one instance of adding system and rigour—active learning by design—to the knowledge which is implicit and informally learnt within organisations (Cope and Kalantzis, 2002; Davenport and Prusak, 2000; Scarbrough, 2001).

I want to argue that knowledge management involves blurring a boundary that is remarkably similar to the formal/informal learning boundary I have been attempting to blur thus far in this paper.

First, to allay a commonsense assumption: all-toooften, 'knowledge management' means IT solutions and these take the form of out-of-the box IT systems, or content management systems, or groupware—such as networked patient medical records or the specialist IP of a legal practice. To be sure, the new technologies have the capacity to enable and transform knowledge. They also have an enormous capacity to enable informal learning, both partially knowledgeable novices and collaborators. But more than IT, knowledge is also the stuff of incessant talk, collaborative working relationships, personalised stories and constant learning.

With or without technology assistance, knowledge management involves transforming knowledge into common knowledge, implicit and individual knowledge into explicit and shared understandings and everyday common sense into systematic designs. It is also the business of codifying these designs as information architectures, paradigms or disciplines. The knowledge management transition in this expanded sense stands in a direct parallel with the transition from everyday informal learning to systematised formal learning that characterises disciplinary knowledge.

Not that this transition leaves the world of tacit and individual subjectivity behind as a poor cousin to something that might be mistakenly considered to be knowledge proper, in the same way that formal learning can never supersede the rich situatedness of informal learning. On the contrary, herein lies the raw material of intuitive professional judgement and creative problem solving. The shape of things sometimes has to be felt before it can be articulated.

However, it is the distinctive project of knowledge management to ensure that collaboration is

institutionalised and that knowledge sharing does occur. As a result, wheels are not needlessly reinvented. Lessons from mistakes are learnt once. And the knowledge of the organisation or community is not dangerously depleted when a key person departs. In short, the extra work of organising knowledge should create less. This is the basis of the 'learning organisation' the sum of whose knowledge is greater than the individual components of knowledge in the heads of individuals (Senge, 1990).

Knowledge management or organisational learning involves:

- Capturing Data: the rudimentary work of collecting the raw material of everyday experience. This raw material is captured in the form of numbers, names, lists, texts, images and the like. These data are direct representations of the world in the form of discrete, unanalysed, uninterrupted 'facts'.
- Systematising Information: the work of categorising, verifying, aggregating, sorting, calculating and summarising data. Numerical data becomes financial information once entered into a financial management system; data on individual customers becomes customer-base information once entered into a database; data in the form of digital content documents become information when they are filed and made accessible in a digital repository.
- Synthesising Knowledge: the work of drawing conclusions from information, evaluating the relevance and significance of information, and applying the conclusions drawn from this interpretative and evaluative work to everyday life situations. These processes involve cognitive processes of abstraction (making generalisations which encompass numerous particulars), inference (drawing conclusions), interpreting (drawing together significant information from a mass of information), critique (assessing the validity and truth claims of information) and transfer (applying conclusions drawn in one situation to other possible situations) (Kalantzis and Cope, 2004). They also involve the active processes of application of knowledge to the world—testing, implementing and evaluating. At the point of application, the cycle commences again: capturing data, systematising information and creating further knowledge. I want to call this an 'epistemological frame' on knowledge, a frame which emphasises the different ways in which knowledge is made.

Knowledge management is not simply about the creation of an abstract resource — something created by the processing of data into information and information into knowledge—it is also a set of social relations and a process of communication.

Knowledge management involves the transformation of personal knowledge into common knowledge through the processes of communication and organisational learning. Knowledge is of limited value in and of itself. People may know things, but this knowledge is of restricted worth if it is not transferable and transferred to other people within a community of common interest. Every moment of learning is, or is potentially, a moment of teaching and learning.

Personal knowledge, moreover, may be well founded on the rigours of data capture, information systematisation and knowledge synthesis. It may well be based on a fully accredited formal qualification. However, it remains ephemeral if it is left internalised, individualised and implicit in a person's practical capacities. Common knowledge, however, requires high levels of communication or knowledge transfer. In fact, it involves systematising processes of learning across the organisation. In knowledge organisations, common knowledge is also formally documented in a process strikingly akin to the creation and teaching of disciplinary knowledge. It is explicit, externalised, shared, social knowledge.

The process of formalising knowledge, of transforming personal into common knowledge, involves a number of different types of refinement:

- Information Architectures. The process of interpreting and presenting knowledge in terms of accessible and recognisable information designs. We might call these information architectures 'schemata'. If we are to provide explicit information to novice creators about these schemata, we will introduce them to their design principles.
- Collaborative Construction. Authoritative knowledge is almost invariably created socially, the product not only of its creators but corroborating referees and 'publishers' who sponsor it and lend the knowledge an organisational imprimatur. This is how the claim to truth of a documented piece of knowledge becomes greater than the personal views of its nominal author.
- Validation Processes. Authoritative knowledge
 the product of delegation (to draft knowledge
 into a communicable form on the basis of
 expertise and capability) and approval (to
 publish, from a person in a position of authority
 who has reviewed the draft text).
- Availability and Access. The character and status of knowledge also depends on the communicative interest embodied in the text—a manual for consumers contrasted with a confidential internal company report, for instance. This is the 'permissions' aspect of formal communication of knowledge.

These are the formal, documentary aspects of knowledge management within an organisation. These are tremendously important as highly considered, focused distillations of knowledge, all designed for transfer of knowledge through effective communication. At the level of the organisation they replicate the processes of creating scientific, technical or domain-specific knowledge across the industry or profession itself. They turn the knowledge organisation into a producing community, as well as an entity which derives and replicates received professional knowledge. And they turn the organisation from a group of experienced workers and learned professionals into an active learning organisation which is also a dynamic teaching organisation.

This, however, is not to ignore the informal processes of knowledge transfer, of taking what is implicit in personal knowledge and creating knowledge through common one-on-one interactions, often orally—such as mentoring or simply scaffolding learning on a personal basis. These informal processes can include novice-toexpert queries, team meetings, stories, informal conversations and private advice. These interactions will mostly be ad hoc, for the most practical of reasons. They are instantaneous and inexpensive forms of knowledge transfer, and powerfully connected to practical and immediate learning needs. The question remains, to what extent can these teacherly qualities be systematised, promoted and taught? And to what extent can the informal domain can be linked into formal knowledge

management systems through expertise directories, help lines, training programs or documented planning forums? Dynamic knowledge management rests on multichannel communications and multiple modes of learning in which a rich informal culture of knowledge transfer is supplemented with a formal program of knowledge management which distils and makes accessible organisational knowledge.

- Why this sudden restlessness, this confusion? (How serious people's faces have become.)

Why are the streets and squares emptying so rapidly, everyone going home so lost in thought?

Because night has fallen and the barbarians have not come.

And some who have just returned from the border say

there are no barbarians any longer.

And now, what is going to happen to us without barbarians?

They were, those people, a kind of solution.

These, then, are our barbarians. Let's embrace them, humanise them, take their weapons and use them for the good. And so, our organisations will become more civilised rather than less.

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