

Revisiting KM's Origins and Objectives

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KM's Background

Knowledge Management is strange - omnivorous, threatening to engulf everything, all theorizing, all research findings. In practice it is less hubristic, focusing narrowly on organizations and management, though its boundaries and ambitions remain unspecified. We are still unsure about what 'knowledge' is, where it resides, how it might be managed or what problem/s KM addresses. The discipline has engaged few beyond those struggling with (a) an economics of knowledge, as suggested by Machlup, Hayek or Arrow immediately after WWII, or (b) a knowledge-based theory of administration or organization as suggested by Simon, Penrose, Drucker or Nonaka & Takeuchi. Both agendas go beyond simple communication and are about managing peoples' learning; the production, distribution and application of economically significant knowledge. Both imply theorists must characterize knowledge as a distinct type of economic asset; but it turns out to be slippery stuff and neither has advanced very far. In the meantime KM been all but co-opted by information technology (IT), exploiting its ability to support both the collection, administration and deployment of identified knowledge and the inter-personal communication and collaboration that leads to learning and knowledge growth. Yet KM as IT is little more than a repackaging of familiar data-processing capabilities. While Drucker and Reich deserve credit for provoking managerial interest in 'knowledge work', Prusak's insights into KM's origins remain as penetrating as any. He suggests it was driven by (a) globalization, which created new information needs, (b) IT, which was pivotal in addressing them in an economical manner and (c) theorizing about the economics of learning (Prusak, 2001).

But Prusak may have overlooked deeper causes. Adam Smith regarded the division of labor and the resulting locally learned and applied practical knowledge as the source of the

nation's wealth. He reminds us knowledge heterogeneity is axiomatic to markets (because buyers and sellers must value things differently if exchange is to occur) and to organizations (because the division of labor leads to knowledge and practice differences that must be coordinated). This is anything but modern and calls attention to the specificity of each actors' knowledge. Perhaps KM is a just a technologically-enabled response to today's technologically-driven specialization - reflecting the resulting burden on coordinators (both marketing and administrative) and the benefit of more cost-effective IT. If so, we see KM is not so new, just as Drucker reminds us the administration of British India was information-intensive long before electronic computing, as was the Greek Empire in Alexander's time. KM is about more than specialization and knowledge heterogeneity.

A second cause might be relevant. On arriving in America in 1831, familiar with Smith's writings, de Tocqueville observed a society structured around practical knowledge and unlike any previous society. On the one hand he recognized 'the business of America was business', on the other that the US individual's political identity was based neither on birth nor family-based attachment to land, nor even on other forms of property - though he saw the Southern states' property-based voting rights were still in place and anticipated their disappearance. Instead he found amazing equality (though slavery was still widespread). As a result of this equality, incomprehensible to Europeans, a man's social and economic identity was changeable, shaped by his own energy and intellect (given women were still disenfranchised). Equality and individualism coalesced into the 'restlessness' de Tocqueville regarded as the mark of American life - hence the enduring appeal of the 'American Dream' and Horatio Alger's stories. These trends continue; the point being that as the influence of birth dissolves, given race is a diminishing factor and modern property becomes increasingly impermanent, what people know (and do) becomes what matters. Today's markets are egalitarian, open to all, for the guilds are gone. We accept *caveat emptor* and the right of others to make or break themselves. Of special import to managers, our organizations are increasingly egalitarian, no longer demanding

the kinds of Prussian subordination Weber's historical researches led him to regard as essential to well-functioning bureaucracies.

If equality and specialization are KM's causes then, at its roots it is a political or ethical phenomenon, the result of a historical confluence, to do with who individuals are today, how they must be regarded by and interact with others. This has little to do with party politics or an organization's power struggles. Rather it goes to the axioms of how managers think about organizing and managing others, most specifically to the implicit Model of the Individual (MoI) they adopt. To what, to be effective should managers see the individuals they lead as having a 'birth-right' or deficiency derived from family, connections to particular schools, or social or religious milieu? Or should they see their identity based on 'property', even intellectual property such as diplomas or experience? Or should today's managers be egalitarian and respect these individuals only for what they know and do? There is some muddiness here, for these are ideal types - but current interest in KM is surely an expression of new attitudes that lead today's managers to a recognition of their dependence on others, a new respect for the professionalism of those in whom they must now put their trust - in short a very different ethics of organizational life. Specialized capabilities, professionalism, and respect for what others do displaces yesteryear's design, control and inducements. This is surely what defines a Knowledge Age - one in which people are defined democratically by what they know rather than by their place in any system of power - be that social, political or organizational. An age in which one's identity is both malleable and based on what one knows and how one knows it. If this is correct KM may be quintessentially American - though potentially copiable, such as in Scandinavia where a like egalitarianism now flourishes. KM may be a reaction to non-egalitarian approaches, the stuff of organizational horror-stories, or to competition against more professional-recognizing organizations, or to the increasing economic complexity of global life. But whatever is driving it, long held in check by the manager's situationally contingent power, new KM-informed management is called for. No doubt KM often seems confused, but the good news is that we

see a rare convergence of academic and practitioner interest in egalitarian modes of management - and this is radical. But is this really what KM is about? Surely KM's techniques are simply a technology of administration, neutral rather than 'political', to be deployed equally effectively by authoritarian or despotic managers? Well, maybe, but we shall see that it all comes down to the model of the 'knowing individual' managers adopt.

Alternative Models of the Individual

Organization theory students probably meet alternative Models of Man first as they read of McGregor's Theories X and Y, the contrasting images of sullen submission and eager satisfaction-seeking. The two models - what we should now better call Mols (Models of the Individual) - lead to quite different theories of organization and management. They are no more than assumptions made axiomatic to the different theories. There is no proving one more 'correct' than the other. But there are Mols beyond McGregor's. Economic theory, of course, stands on Rational Man, the fully informed and coolly logical Dr. Spock that Simon criticized so roundly. Emotional intelligence suggests another Mol, Proustian perhaps. Each is an assumption about our own nature and gives rise to different notions of who we are, how we interact and, most importantly for managers, how we might shape each other's behavior. I am suggesting KM's novelty is bound up with this variety of Mols and that analyzing them can help us grasp what KM is really about.

Academic disciplines try to be axiomatically parsimonious, economics, mathematics and the natural sciences especially. KM is 'young' in that its confusions arise from its openness to multiple Mols. Eventually the discipline will 'mature' and settle on a single Mol. Obviously Rational Man is allowed, though he is actually a transparent creature of the data he receives. He neither feels, nor knows nor remembers anything, he merely computes. He is denied emotion and character and deserves little of the respect suggested in the section above. Indeed the IT definition of KM presumes employees are rational appendages of the

organizational Leviathan - its integrated ERP system perhaps, but certainly its wholly managed environment. The KM task is to collect data and deliver them to the correct decision-maker at the correct time. This seems to fit our notion of a bureaucratic organization, as rationally organized as possible, and the mantra that both management and knowledge-work are about rational choice. IT systems engineers and Business Process Re-engineering consultants apply these ideas to mechanize the organization in the pursuit of order and efficiency. Data is universal, objective and value neutral - nothing but the facts; the decision-maker is logical, universal and invisible.

This is KM class A and it is big business indeed. But as other Mols are admitted, other varieties of KM emerge. Bureaucratic Man is far from identical to Rational Man. Rather, he is a creature of the organizational power system, legitimated by its acceptance, after which he thinks precisely as he is instructed. He brings his native logicity to work and computes, agreed, but within the contextualized rationality of the organization and its goals. Bureaucratic Man is limitedly rational, in Simon's sense, and local, for his task extends only to the role assigned. His superiors know things he does not and their power over his thinking and practice is the antithesis of professional respect, exacerbated by divvying up of the organization's knowledge. Given a division of labor, the next-cuber's work may be incomprehensible to him. Hence the KM challenge is to integrate the organization's individuated workers into its Leviathan, to minimize the waste or neglect of any knowledge that may be 'lying around' or 'hoarded' by employees. But is this condition no more than an easily reengineered class A oversight? Can individuals share others' data without limit? Surely not. Bounded rationality is part and parcel of the division of labor and professionalization. In practice organizations are likely to employ more knowledge than any single individual can grasp - the Leviathan is beyond him - and knowledge-sharing projects have to bear such limits in mind.

A quite different Mol is invoked when KM theorists assert the economic, organizational or personal significance of 'knowledge', implying that it is not simply about making facts available.

Knowledge is of value, as Bacon noted. Class B KM goes beyond facilitating objective decision-making, whether wholly or intendedly rational. Facts can be unavailable and class A KM addresses this, but values are different. While facts may be representations of a knowable world, values are representations of how individuals 'know' and evaluate facts. We need to go beyond passive knowledge holding, the mere holding of data in memory and giving it up on request, and adopt a different Mol that presumes individuals have 'attitude', X or Y or something else perhaps. When the KM project is about collecting significant data into the Leviathan, the organization unavoidably strikes an attitude too, differentiating the significant from the insignificant. There may be disagreement - for values are about differences between knowing individuals. One person might make his knowledge available another might be 'resistant'. Management might try to override resistance with 'knowledge engineering', systematically discovering and codifying what different employees know and do, or developing controls and incentives which encourage otherwise 'resistant' individuals to yield up their knowledge assets. Likewise many KM projects focus on 'capturing and retaining' the departing individual's knowledge-assets - which seem neutral in class A projects, but take on additional dimensions when, as in class B, individuals value what they know. This may also be for intrinsic reasons - when, as implied by the division of labor, the employees have had a hand in developing the knowledge - so these feelings need to be taken into account if the retention project is to succeed.

Note that if we can establish Attitude Man's rationality for hoarding his knowledge (because it is the basis of his job-related influence) or sharing it (because it increases his visibility to top management), etc., the previous Mols can be merged - provided the individual's values can be aligned with the organization's. But what if this is not the case? Then, instead of class A's sense that knowledge is neutral class B theories open up questions about 'whose values?' which cannot be analyzed abstractly. On the contrary, the specific knowledge and the values various actors attach to it must be identified. Consequently the class B Mol is unlike class A's. Its rationality is not universal. Rather, class B individuals have memory - manifest in

the values they bring to bear in their decision-making. Not only do they process data, they interpret it in the remembered context of their lives. They provide the data with meaning in the situations that define class B - when meaning could be otherwise, especially for other individuals or organizations.

Rational Man has no problem with meaning, seeing data as objective facts, verified scientifically perhaps. But when meanings are plural, situated and contested organizations operate as sources of meaning for those involved. In the class B world they are not mere machines operating on universal abstract principles. Bureaucracy not only supplies the employee's local rationality but the meaning of its data too, typically derived from the organization's chosen goals. Like data, meaning can be communicated, though it cannot be received as data. Rather, it is the subjective response to objective data, so communicated indirectly. Class B KM projects are about managing meaning; for instance, bringing new employees into the organization as a pattern of meaning. They complement the class A projects that take meaning for granted, ignoring its management. Organizational communication can obviously cover both data and meaning and has been reinvigorated by attention to story-telling and narrative. The key point here is not that knowledge is power or that data is nothing without meaning - all of which is true but not most pressing for managers. As Simon argued, managers need to coordinate employees by aligning meanings because they are boundedly rational and work in a world that has not been reduced to data. This entails a respect for employees' subjective views. KM theorists who want to go beyond class A must appreciate the class B Mol posits a semi-independent individual whose interpretations are nevertheless accessible and manageable, individuals who can learn (acquire or generate) meaning as well as data. While class A dismisses meaning as insignificant, class B spins around it. Class B also posits a multi-person collectivity and consequently socialized individual, so going beyond isolated Rational Man. As a result, class B KM projects often seem to be about managing the organization's - or the group or team's - culture.

As if the A and B Mols were not complex enough, there is yet another class of Mol immediately relevant to KM theorists. Critics of A and B class theories point out both assume the relevant knowledge-assets (either data or meaning) can be explicated (codified or languaged) and separated from those holding them and transferred to others who can then apply them. While these critics generally admit the possibility of separable knowledge - the type implied by science - they go beyond to assert employees generally have yet others kinds of knowledge at their disposal. This is where 'tacit' comes in. Indeed we might argue Nonaka & Takeuchi put KM on management's map in 1995 precisely because it offered a way of identifying the employees' un-objectified 'tacit' knowledge, as well as managing the processes of its production and application. Even without being clearly defined - indeed, its meaning remains controversial - 'tacit' has become one of KM's hallmark buzz-words. Some treat it as a subset of class A thought - objective knowledge of a knowable world that is yet to be codified. Others, finding something completely different in the term, say it implies a third class of theories in which the knowledge that matters most is inseparable from those who hold it and act on it. This knowledge, they argue, is not objective, it is even more subjective than is meaning. Moving it is difficult at best, and owning it impossible.

The class C Mol is quite different from those of classes A and B. While having class A's computing capacity and class B's awareness of meaning, it also capable of another type of knowing - what Polanyi dubbed 'personal' in contrast to either shared scientific-universal knowledge or the organizationally contingent. It deploys modes of learning and remembering that are not shaped by the methods of science or patterns of narrative shared with the rest of his collectivity. The appeal here is typically to learning by doing - by which is meant practical engagement with the context's specifics, such as riding the bike or swimming. With the oft-quoted 'we know more than we can tell' Polanyi pointed to this third type of knowing. But he gave KM theorists a gnomic challenge along the lines of Fats Waller's explanation of rhythm - 'if you have to ask, you ain't got it'. So while class C theorists accept tacit knowledge, by

assumption or for who knows what reasons, what can they say to their colleagues in class A or B who can look to science or to the community to warrant their knowledge? Plus what can they say to managers who tell them their employees' intangible knowledge assets are their organization's most significant resources - beyond agreeing with them? Can such third-order resources be identified and managed? Can those un-applied be discovered and brought into play? Can the fruits of experience - best practices - be shared systematically?

KM's struggle with epistemology

While the KM literature is muddled in that it embraces all three Mols without being up front about their implications and differences, it has been further confused by the clarification strategies adopted. The A literature treats knowledge as unproblematic, of a single type modeled on positivist science, generated systematically, objectified and readily transported. Some authors even suggest defining it is pure pedantry. The B and C literature is darker, deeper, and sprinkled with attempts to define non-objective knowledge. We debate meaning, whether tacit knowledge can be converted into explicit or objective knowledge, whether knowledge differs from knowing, etc. We hear of *techne*, *metis* or *phronesis* or of Confucian or Hindu or even Continental thought. While some find this interesting we need to bear two things in mind. First, we risk subordinating KM to epistemology - implying we need to be clear about knowledge before we can theorize its management. Not only is epistemology difficult stuff, still inconclusive after several thousand years of effort, it is also peripheral to KM's real objective, which is to tease out the present managerial and strategic implications of the egalitarian and professional turn outlined in the first section, of managers' growing dependence on what others alone know. Managers' concerns are local while epistemologists are raising timeless universal questions like 'what does it mean to know?' and 'can we differentiate knowledge from ignorance or opinion?' These matters are central to the human condition, our views of society, religion, and Nature, how we relate to each other, and so on. But management may not need to be so

extensive - it may be less than life, dealing narrowly with today's organizational relationships. If so, epistemology directs us towards the wrong target. There is no way of answering epistemology's questions, indeed answers are not its intent, and to ask KM to outdo epistemology is to consign it to eternal muddledom. What might be more useful?

In the sections above we shift focus from knowledge to knower. KM's challenge to managers is to grasp knowing for themselves versus trusting to someone else's knowledge - as we trust surgeons while anesthetized. We cannot hope to know what surgeons know, yet we put ourselves in their hands because of who we think they are, know and can do. Trust is a brutally abused notion these days so the way KM hangs on it needs clarification. The bottom line is that equality and professionalization force managers to think and act differently. There is nothing new here. For a century or more organization theorists have been searching for alternatives to the power-based individual-disrespecting bureaucratic model that underpins most managers' sense of their work - the legacy of Scientific Management, perhaps. But those who say managers must become epistemologists to break out of the machine model and grasp the various kinds of knowledge epistemologists have identified over the millennia, hand them an inappropriate and fruitless task. KM interests managers precisely because they sense something important in it; because they have personal (tacit) experience of class B and C people. But telling managers to seize these kinds of knowledge, to possess them and make them their own - or the organization's - is to miss the whole point. Seizure means disrespect not respect. It is an echo of the command and control model. No way can that work with professionals whose knowledge ranges far beyond their managers'. Modern organizations will break, and are breaking, those who think they must lead from knowing everything - whether through metrics, accountability or back-channel snippets. KM is really a bridge towards a post-modern theory of management, a kind of leadership focused on the plurality of professional people whose collaboration is 'mission-critical' and who therefore demand respect rather than on designing infallible employee-proof systems. These are individuals whose most valuable

knowledge must be accepted as inexplicable and incomprehensible. So how can managers manage in such a world? Or more specifically, how might KM and its insights help in an era when their 19th/20th century design, control and command strategy has been exhausted?

The point of leading the reader through the A, B and C classes above is to focus attention on the different models of the individual implied - just as McGregor sees X-people and Y-people. How one manages depends absolutely on who one judges others to be - judgments that are beyond proof or science. Managers have to turn the entire epistemological project upside down. Ironically, since knowledge must remain eternally problematic, KM actually problematizes the knowing individual and thus how managers are to judge and engage them. Instead of asking about alternative kinds of knowledge managers must consider the alternative types of people available in terms of what they can or cannot know, their post-modern identity. Epistemology is not only about defining 'what is knowledge?' - it is also an attempt to define the individual who knows what can then be known. The point of studying the categories of Greek epistemology - *episteme*, *techne*, *phronesis*, *sophia* and so forth, to say nothing of the Medieval cardinal virtues or 'faith' - is not to attempt to define knowledge. That would be true hubris. Rather it is to explore the kinds of individual these thinkers admired for their balanced and grounded knowing. The Mol they imagined contrasts vividly with the stunted stereotypes underpinning contemporary organizational theorizing. Rational Man is allowed no memory, no values, no faith, no character - but is presumed perfect nonetheless. His universe is one of objective data about a fully knowable world. Bureaucratic man's memory, values and character are similar but not even his own; his are erased. These are not new criticisms and KM brings nothing fresh to them. Rather KM leads us to an awareness that managing begins with strategic choices about the varied and heterogeneous people to be managed, strategic in the sense that we can never be certain about others - nor indeed ourselves. Just as organizational strategy is only meaningful in a world that is beyond being completely known but in which one

must act anyway, so KM is only meaningful when people (the knowers) are similarly problematic but have to be depended on anyway.

Given the thorough analyses of meaning in anthropology, social psychology and sociology, KM only has something new to say because it reaches into the tacit, into the embodied category that Polanyi and Blackler (Blackler, 2002) explore, into the states of 'flow' which Csikszentmihalyi (Csikszentmihalyi, 1996) or Nonaka et al explore (Nonaka, et al., 2008), when an individual's intentional actions are not entirely under their conscious direction. Epistemology has not dealt well with the forms of human knowing that stand outside language, beyond our consciousness. But in the end managers are more concerned with activity than thought, so KM hits a nerve with its embrace of the 'tacit'. It may be helpful to point out that the Mols sketched above imply three management-based categories of knowledge: knowledge-as-data, knowledge-as-meaning and knowledge-as-practice (Spender, 2007). None stand up to epistemological criticism, of course, but are handy for managers who want to get a sense of the kind of interaction options they have with others. The Mols are qualitatively different in that class A knows only data. Class B knows both data and meaning. Class C knows data and meaning, but also knows how to bring them into worldly practice, into what we might call a 'reflective practitioner' - were that label not already taken to mean something else. This person, of course, is the puzzle at the center of 'human agency'.

KM is novel because it demands managers begin their work by classifying the other people available to implement their goals. Management and organization are about working through respected others rather than designing machines. KM suggests a method managers can use to help them here, an alternative to reducing those people to subservient cogs. But it also gets into the specifics, avoiding the bland 'new wave' exhortations to abrogate responsibility and trust others - a denial of all worldly wisdom. Managers must decide: Does the person available have needed data? Does that person, cognizant with the data, have an interestingly different way of looking at the situation? Can this person get what is needed done?

The manager's answers to these questions determine the interactions and their modes of managing. McGregor's X-people prompt negative answers. Y-people seem more promising but present managers with major problems. How can they be channeled towards the organization's goals?

KM proposes managing by careful attention to the interactions shaping what these people need to know in order to contribute. Class A individuals are managed through data alone, only expected to compute the data's implication - colorless staff to advise the real decision-makers. The IT model of KM is well suited, the manager's respect being based on their awareness and computational thoroughness. Class B individuals exist in an utterly different universe of opinions, contested values and interpretations, when none are definitively testable or certain. Not only can these people connect the dots for managers who cannot, they can act as foils, contesting the manager's sense of the situation's meaning. Data is relevant but not central for it is always hostage to alternative meanings. Managing class B people is intensely human, seeking a balance between letting them think their own thing and reminding them of the organization's goals and perceptions. Class B KM, such as story telling or working through a mission statement, helps stabilize this kind of relationship while facilitating a respectful discourse. Class C individuals know the relevance of data and meaning but, immersed in the contexts of local practice, are perpetually rebuilding bridges between management's vision and local execution. The experience leads them to insights that the other Mols do not generate, to the situational truths of which managers are often wholly ignorant.

KM's project

The chapter takes off from KM's confusion. Actually things are worse - KM is in crisis, pushed by IT's hype. Those who recall 'expert systems' 20 years or so ago have seen this movie before. KM is in danger of becoming an ex-buzzword, oversold as a breakthrough technology to further the Scientific Management agenda of efficiency and minimized waste,

especially of the organization's sensed but undefined 'intangible assets'. No question, new data-management and mining techniques have added to IT's usefulness - but this is little to do with 'intangible knowledge'. KM language obscures the explicit content of electronic data processing (EDP). IT systems collect, parse, store and move data, end of story. Meaning is the subjective component we humans add to data to transform it into 'useful information', available to our life-world. While not like data or the stuff of IT systems, meaning can be managed by those who grasp what they are doing - which is about people not facts. Managing others' expectations, perceptions and values takes us back to the beginning of language, transforming isolated individuals into human collectives - of which organizations are the type of special interest to managers. But organizations are also patterns of collaborative practice that take us beyond the reach of language as the mode of their creation and management. As Tsoukas (Tsoukas, 2005) and others have reminded us, practice is a matter of instants and what can be learned there can never be fully captured in the abstractions of language, no matter how local. Tacit points to some middle ground between the truly unique, which stands outside understanding, and the familiar which, still lying beyond language, is remembered elsewhere than in the conscious mind - in the body perhaps, as dancers remember, in the hands, as violinists and ball-players remember, or in the gut, as some think.

The question/s is KM attempting to answer? The antithesis of Scientific Management's. If organization involves others, they must be managed. KM suggests managers have three primary modes of directing those seen as human beings rather than mindless serfs. Class A thinking has been familiar to both managers and managed for centuries. While it may take a narrow view of people as controllable through instruction, data and incentive, it presupposes the managers issuing the instructions understand what the operative needs to know to execute correctly. So, given adequate instructions, management comes down to incentives - a position economists and bureaucratic theorists still find adequate. KM has nothing novel to say about this. But when the fully-comprehending manager model breaks, when those they manage are

allowed to have opinions and values, KM moves into a quasi-political mode, focusing on meaning and persuasion. Its strength is to abhor subordination as the mechanism of control; on the contrary, managers must accept they know less than those they depend on, and so be open to learning. Class B KM stresses language and narrative techniques to create a managed dialogue, not propaganda. Class C KM is clearly the subtlest and most-demanding, requiring managers to entrust themselves (and their careers) to others' actions, irreversible in the sense that actions lie in the past while statements of opinion can always be rejected courteously.

The trinity is the core of KM and it only makes sense given the egalitarianism and professionalization that has finally penetrated the workplace. It offers a style of management that releases us from the grip of bureaucratic theory without denying managers' crucial contribution. KM's central questions spins out of its initial assumptions - as must every theory's. If organizations are about people, then the managers first task is strategic - to choose how to view the people through whom they work. KM is post-modern in that it embraces multiple answers to the most basic questions managers must address - What is Man? and Who am I? It is pragmatic rather than dogmatic, and its heuristics spin out of the richness in how we humans know.

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