

# Reframing the Knowledge Debate, with a little help from the Greeks

Hilary C. M. Kane (Teaching Fellow)  
Dept. of Computing & Information Systems  
School of Information & Communication Technologies  
University of Paisley  
Paisley  
Scotland  
PA1 2BE.  
[kane-ci0@paisley.ac.uk](mailto:kane-ci0@paisley.ac.uk)

**Abstract:** Knowledge is a topic that covers many disciplines with writers attempting to formulate an understanding of it and its relevance to their field. Philosophical frameworks may offer a way to gain a deeper appreciation of its relevance to management and organisations, looking in particular at Socrates, Plato and Aristotle.

**Key Words:** philosophy, management, knowledge, organisations

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## 1. Introduction

There has been a plethora of writing in the field of knowledge management with a great deal of the literature focused in the area of how it might be applied in business. This paper considers two difficulties that may emerge from this. Firstly, there appears to be no firm convergence about what we mean when we talk about knowledge and, secondly, the constructs used by writers to talk about tacit and codified knowledge are less evident as a way of understanding knowledge in the philosophical writings here.

In order to move consideration of the area forward, it seems worthwhile at this juncture to take a fresh look at what the early thinkers in the arena of knowledge understand this to mean. What Socrates, Plato and Aristotle may offer is insight into how we could view knowledge within the current writing in this area. This paper looks at some current writing in this field, considers some of the literature on knowledge in Greek philosophy and attempts to draw some insight between these and present problems in the current writing.

## 2. The Current Position

A variety of writers describe knowledge in terms of assets, intellectual capital, knowledge work with each ascribing a different meaning to that. So that Fahey and Prusak (1998) call knowledge "what a knower knows", whilst Stewart (1997) refers to it as "one man's knowledge is another man's data".

Much of the current work in the area of knowledge has emerged from the initial work of Michael Polanyi. His seminal work "The Tacit Dimension" (1966) has paved the way for others to view knowledge in a compartmentalised way. In this work he attempts to encapsulate what he perceives as one of the dimensions of knowledge - namely its tacit quality (ibid). The core element of this is that "we can know more than we can tell" (ibid). The implication of this statement is that there are aspects of what we know that we cannot clearly enunciate. Other writers, including Nonaka and his work in knowledge cycles, have taken up this facet of knowledge in recent years. Nonaka (1991) has reiterated this distinction between tacit and explicit knowledge, saying, explicit knowledge is formal and easy to communicate, e.g. akin to instructions for the operation of a machine; whereas tacit is more difficult because it is harder to communicate, personal and difficult to formalise (ibid). His research, based on fieldwork in Japanese companies, has been used as a basis for arguing that these companies have a different perspective of organisations. He thinks that this affects how knowledge is created in organisations as he says it becomes a "way of creating a particular vision or ideal" (1991, p. 97).

Leonard (1998) also talks about knowledge, this time within an organisational context. She sees it as continually renewing, with the physical systems in an organisation retaining knowledge because they are encouraged by the managerial systems created, to assist

learning. These, in turn, are supported by values. Leonard (1998) talks about learning as the grounding for knowledge. This seems to support the distinctions made by Nonaka when he talks about tacit knowledge.

The traditional stance has been to progress through information to knowledge and finally wisdom. Davis & Botkin (1994) take a different approach, talking about knowledge as the application and productive use of information. This would suggest that there is an interaction between knowledge and information. This is echoed, although not directly, with Von Hippel's (1994) reference to "sticky information", which suggests that there is a correlation between the cost of information and the expertise required to obtain it and the amount of information required. It must be acknowledged that these writers approach this area from differing perspectives; however there appears to be an implicit acknowledgement of knowledge when Von Hippel talks about 'stickiness' and how this can be paralleled with knowledge. Whilst Davis & Botkin (1994) explicitly see knowledge in terms of information and its use by the individual, Von Hippel (1994) perceives degrees of information. In essence, the greater the degree of difficulty in accessing information, the more 'sticky' it becomes.

It is clear that there are a number of different views about what knowledge, both tacit and codified, is and its relationship with information. This presents difficulties for organisations as they are encouraged to manage an asset termed knowledge, whilst it is not always clear what is meant by the terminology. To adopt a philosophical stance may provide additional insight to aid organisations in making knowledge productive for them.

### 3. A Philosophical Approach

Epistemology is derived from the Greek word, episteme, meaning knowledge. This branch of philosophy is concerned with understanding the nature, limits, structure, origin and criteria of knowledge. The earliest contributors to this field are the Greek philosophers. This paper looks specifically at Socrates, Plato and Aristotle's writings to assess what contribution they may offer to current perspectives.

#### 3.1 Socrates

All that is known about Socrates' philosophy is derived from the writings of Plato. Socratic theory has largely been based on the

conception that knowledge is intertwined with a perception of the separateness of man's body and soul. This has led to a quite distinctive view of knowledge.

The role of a philosopher is centred around this concept of separateness. In his work, *The Phaedo*, Socrates attempts to address this, conceiving a philosopher as a "lover of wisdom". In order to be a philosopher, Socrates says he needs to separate the needs of his soul from that of his body – "whoever of us is prepared to think most fully and minutely of each object of his inquiry, in itself, will come closest to the knowledge of each" – 65e. He sees the logical conclusion of this as being – "knowledge is nowhere to be gained or else it is for the dead" – 66e, because it is only at death that the body and soul are separated. From this understanding of the role of a philosopher, there are two important aspects of the Socratic conception of knowledge. Firstly, the interrelationship between the body and soul and knowledge, which allows Socrates to develop a theory of Forms, and, secondly, the belief that knowledge is not acquired but recollected as it is innate to the individual.

The result of the interrelation between body and soul is that, according to Socrates "...we have got pieces of knowledge of all those things before birth... if having got them, we did not on each forget them, we must always be born knowing, and must continue to know throughout life: because this is knowing – to possess knowledge one has got something, and not to have lost it; or isn't loss of knowledge what we mean by forgetting" – 75d (*The Phaedo*). This means that the choice is that we were born with certain innate knowledge and we were later reminded of things that we'd already known – 76b (*The Phaedo*). The implication of this is that Socrates conceives knowledge to exist within the individual and any efforts to ascertain knowledge are bound up with a process of aiding an individual to recollect what is already within them.

This position is supported in another of Socrates' work, *The Meno*. As with the *Phaedo*, this work does not deal directly with knowledge, but contains indirect references to knowledge. Although the central theme of the book is concerned with trying to ascertain what constitutes virtue and whether it can be taught, knowledge is considered as a possible explanation of virtue. The idea that knowledge is innate is revisited as Socrates states that it is impossible for a man to inquire into what he

knows or doesn't know. He believes that man cannot inquire into what he knows because he knows it and he cannot inquire into that which he does not know because he doesn't know into what he should inquire. To illustrate this point he questions a slave boy in such a manner as to suggest that the answers the boy gives must have already existed within him and that it was only through careful questioning that this pre-existing knowledge was elicited.

Bound up with this idea that knowledge always exists internally to the individual is the belief that, according to Socrates, knowledge can be taught, but only in so far as it is done by prompting innate recollection. Thus, learning is actually nothing more than recollection of that which is already known. Consequently, a person does not acquire knowledge through learning; rather learning is a process of recollecting the knowledge that already exists in the person. This view is particularly clearly illustrated in *The Phaedo*. The essence of this is that "learning is actually nothing but recollection" – 72e. Socrates argument for this is that in order to be reminded of something, it must have been previously known. If knowledge is present in this way, it is recollection of what has previously been known.

In order to illuminate this point, Socrates attempts to describe how it is that we know what equality is. He asks what it is about the essence of knowing that something is equal that enables someone to say that two things are equal. We know of a thing that is equal. How did we get knowledge of this? If the senses are used to examine that which is the abstract concept of equal, then knowledge of equal must have existed before the senses (according to Socrates, before birth). He uses a similar illustration looking at the concept of good. If we know something is good and can compare other things with that by using terms such as "not as good/ worse/ better", then we must have some sense of what good is. Thus, in order to use our senses to be able to draw these comparisons, we must have known what was good before we had our senses.

### 3.2 Plato

Plato's influence in later philosophical thought has been written, in part, due to the formalisation of Socratic thought and his own development of this. Whilst his earlier dialogues reflect Socrates' views, his later works, in particular *The Republic*, reflect his

own thinking in terms of the role of the philosopher and knowledge.

Like Socrates, he was concerned with philosophy for the good of the soul and less in what we might conceive as its practical application. He is similar to Socrates in conceiving the separateness of the body and soul and appears to view the role of the philosopher in a similar light. In *The Republic*, he introduces these thoughts by examining the role of the philosopher, which he defines as "someone glad to sample every subject and eagerly sets about his lessons with an insatiable appetite" – 475c. With this base, he attempts to examine the distinction between belief and knowledge. His view is that knowledge is concerned with what he sees as reality and the realm of the real. Belief on the other hand is concerned more with the unreal and incomprehension.

This separation is most closely seen in what Plato describes as Forms. He sees a fundamental difference between mere opinion about the visible realm, what we sense in terms of real objects and his theory of Forms. Thus he is concerned with what justice might be, or to understand what a thing really is. What is in the arena of what we can sense is unstable, because what we physically sense might be wrong. Instead, with the Form, he believed that we could know this independently as it was not simply based on opinion, but also because it was possible to give an account of why the belief was true.

To try to illustrate this Plato relied heavily on allegory. In *The Republic*, he cites several of these, the most famous perhaps being that of the Cave. This describes a situation of a person, able to see shadows in a cave, as they are shackled to others. One person is subsequently unshackled, taken outside and above ground to the light. This is intended to exemplify both the role of the philosopher and their role towards other people. This person then returns to the cave to explain to those remaining what the shadows mean.

In essence, Plato is suggesting that at the lowest level of reality are shadows, pictures and other images, centred in conjecture and therefore highly unreliable. The physical realm also has ordinary physical objects and our perception of them provides the basis for belief. In the realm of the intellect are the simple Forms and systematic knowledge of

them. At the highest level are the significant Forms, or as Plato describes them, virtues, e.g. good (which Plato describes as the ultimate virtue). To apprehend these is through intuition; that we know what is good is by reason of the intellect, instead of apprehending this by sense. Another example of this would be in relation to justice, i.e. to know a just act, we must know what justice is abstractly, which exists separately from examples of just acts.

### 3.3 Aristotle

Differing greatly in approach and substance to both Plato and Socrates, Aristotle saw knowledge clearly focused in the realm of the world. He is also more closely aligned to current thought and practice in the scientific community as the logical, systematic approach he adopted appears to be more concerned with the practical use of knowledge. Where Plato and Aristotle concurred was in attempting to answer the question - what is the form that makes things what they are? However, they approached this question differently.

Aristotle's thinking commences from the standpoint that all knowledge begins with our knowing things about objects in the physical world. The result of this is that to discover principles and causes for things, it was necessary to conduct extensive observation. He believed that the world could be understood at a fundamental level through the detailed observation and cataloguing of phenomenon. Thus Aristotle was concerned with observing as many examples as possible and using these observations to derive underlying principles. In this way, he thought that reason could provide knowledge of ultimate truths.

Using this method, he sought to categorise knowledge. He was able to observe that certain things can be said to be true all the time. Thus he could say that certain objects, as he described them, are true all the time, e.g.  $1 + 1 = 2$ . He was therefore able to identify certain characteristics that these objects had, which was that they had certainty and precision. Other objects he considered did not fit into this category, e.g. human behaviour. In those circumstances he could say that the characteristics of this were probability and uncertainty. The importance of this is that Aristotle did not insist that certainty was always required.

Aristotle defines the difference as "we must be satisfied to indicate the truth with a rough and general sketch: when the subject and the basis

of a discussion consist of matters which hold good only as a general rule, but not always, the conclusions reached must be of the same order. For a well-schooled man is one who searches for that degree of precision in each kind of study which the nature of the subject at hand admits" (Ethics I.3).

Before Aristotle could answer the question – what is the form that makes things as they are – he tried to deal with - what is a thing. His answer was that the individual substance is primary. As well as being individual it is numerically one. Here Plato and Aristotle diverge because Aristotle stated that if this individual substance did not exist, then nothing else could. Plato thought that it was the form that gave the reality to everything else.

Once a definition has been given for what a thing is, then it is necessary to look at what makes it what it is. Here Aristotle thought that a thing had an essence, given in the definition of the thing. This definition that gives the thing essence has a characteristic format. The fundamental difference between Aristotle and Plato and Socrates was on this idea of separateness. Aristotle did not separate what is said of a thing from the thing itself, whereas for Plato Forms exist independently of the thing.

## 4. Problems and Possible Directions

There are a number of problems with what is being said by current writers in the area of knowledge and knowledge management. All appear to be concerned with the fundamental question – what are we talking about when we discuss knowledge? Looking at the specific difficulties these writers have, it is possible to pinpoint material difficulties that exist and also consider what contribution the work of the Greek philosophers may have to make in connection with this.

Firstly, there appears to be confusion between what is meant by knowledge, tacit and explicit, and information. This confusion manifests itself in the disparate definitions of these terms. When Polanyi (1966) talks about tacit knowledge, "knowing more than we can tell" he is implicitly suggesting that there are aspects that we as individuals cannot convey to others. The outcome of this is that there are difficulties inherent in the communication of tacit knowledge, but this could equally apply to all forms of knowledge, as there appears still to be confusion surrounding the terminology of knowledge itself. Nonaka (1991) has attempted to address this, saying that to

convert something from tacit to explicit knowledge requires a process of articulation. However if Polanyi's view is that there are certain things that we cannot articulate then Nonaka's construct of the knowledge spiral as a way of moving from tacit to explicit or vice versa lacks cogency. Nonaka (ibid) also says that a vision or ideal is sufficient to constitute knowledge as, he says, 'it is highly personal'. However organisations frequently attempt to verbally explain their mission or ethos in written form as described by Leonard (1998) in her example of the "HP Way" (a statement by Hewlett Packard to convey the ethos of the company to its employees). Where the boundary lies between what is meant by knowledge, tacit or codified, and information appears to be blurred with the example of Leonard (1998), particularly if information is considered to be data with meaning.

Linked to this confusion, there appears to be additional uncertainty among writers in how they define tacit and explicit knowledge. There appears to be no adequate description that distinguishes explicit knowledge from information. Nonaka's view is that explicit knowledge is easy to communicate. Davis and Botkin (1994) similarly describe this type of knowledge as 'formal, systematic, easily communicable, like formulae'. Taking these expressions in conjunction, it is evident that they could easily express a description of information and thus this only magnifies the difficulties in the distinction between information and codified knowledge. It also suggests that there is still no unified view of what knowledge really is and how it differs from information. Whilst there is no agreement on what constitutes knowledge, any attempt to manage it becomes increasingly difficult as we cannot manage what we cannot understand.

Looking at the philosophical position of Socrates to Aristotle, the first main distinction appears to be that these writers seem to have approached the area of knowledge from a different direction. They appear to have made no distinction between that which is tacit or explicit. There is no discussion of information or data. Socrates may be more closely linked with how Polanyi talks about knowledge in so far as they both appear to see that knowledge is something internal. The distinction between them appears to be that Socrates' approach implies that it is possible to discover that knowledge which is innate to the individual, perhaps by careful examination, allowing an individual to recollect what they already know. This does not sit entirely comfortably with

Polanyi, as his view would not always permit that which is internal to the individual to be made explicit. Aristotle represents a more closely aligned perspective with current writings, as he believes that general statements might be made from observation of the real world. In that case, he could be said to be more closely linked to writers such as Nonaka, who, although they make a distinction between tacit and codified knowledge, do allow for the possibility that one can be transformed into the other. However Aristotle differs in that he perceives such things as human behaviour as not being capable of certainty in terms of knowledge. This would suggest that there is a point at which observation of real world phenomena cannot allow a complete deduction to a theory particularly in the area of human behaviour.

With the standpoint of the Greek philosophers that there appears to be no distinction made about that which is tacit, codified or information, this might be both positive and negative. Whilst they do not distinguish these terms, they offer a different interpretation of what knowledge is. Importantly, they all appear to acknowledge that knowledge resides within the human. However, Socrates implies that effort should be directed to ways of eliciting what is internal and Aristotle suggests that sufficient observation offers a degree of certainty, albeit weak. In addition, by not defining knowledge in terms of what exists inside and outside the individual they are not faced with the difficulties that appear to be inherent in current writings where these boundaries are blurred.

Finally, in relation to tacit knowledge there are inherent difficulties in translating what we understand by knowledge into something meaningful for others. Nonaka talks about tacit knowledge as something that is hard to explain or communicate and Polanyi actually believes that there are things that we simply cannot communicate. The implication of these views is that it raises the issue of what place learning and experience have in the creation and transfer of knowledge and how, if at all, knowledge can be communicated. Within an organisational context, the work of Schein raises interesting issues for consideration in the field of knowledge. Schein's (1984) work relates to organisational culture but may have resonance for this area. Schein (1984) talks about organisational culture having levels, with values being the second level as they underpin the outward symbols of a culture. In the same way, instead of continuing the debate around

what constitutes knowledge, it may be appropriate to consider what factors such as an individual's own experience, learning and values have in transforming information into knowledge or being the essence of what constitutes knowledge. Leonard (1998) talks of organisations needing to continually innovate, destroying what has gone before and sees values and norms as the personality of an organisation. There seems every possibility that the same could be applicable at an individual level.

Although Socrates does not use the word tacit in his writings, both Plato and Socrates appear to be concerned with what is innate to the individual. It would appear that their conception, that by careful examination of the individual a person can recollect that which they already know, raises interesting issues touched on by Leonard and Schein and the role of values, culture and experience as having relevance for writers in the area of knowledge. Aristotle, despite adopting what would be considered a more traditional scientific approach, still highlights uncertainty in human behaviour, which would have implications for dealing with what writers describe as tacit knowledge. The key feature of all the writers is that they do not appear to make the same, possibly artificial, distinction between that which is tacit and that which is codified. Instead of adopting this construct they are much more concerned with aligning knowledge to the individual, describing its properties, its essence. In this regard, it is perhaps an erroneous approach to try to compartmentalise knowledge, but instead it would be more beneficial for organisations to see the individual as the knowledge base and use that as the starting point with knowledge. Using the approach adopted by Socrates, it is possible to acknowledge that efforts to manage knowledge are then more clearly directed at an individual level, as he would consider that knowledge resides in the individual rather than in terms of managing information as seems to be the current stance.

Thus, it is evident that people writing in the area of knowledge and knowledge management appear to have blurred the boundaries between knowledge, both tacit and explicit, and information. The potential impact of this is that for people to manage knowledge, they should be clear about its boundaries and its interaction with information and data. The evidence, particularly from the writers considered in this paper, does not appear to support that position. The outstanding feature

of the Greek philosophers is that they offer an approach that seeks to unify knowledge as a concept rather than break it down. By adopting this approach, there is a greater focus on the individual and their essence as the bearer of knowledge.

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