

WHAT KNOWLEDGE IS: AN INTEGRATED PERSPECTIVE

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Abstract

What is knowledge? It has always been considered as the core and fundamental argument in the field of knowledge management study. This paper is going to explore the nature of knowledge from an integrated perspective. Through systematically discussing and analyzing philosophy, sociology and knowledge management discourse which formed the foundation of the study of knowledge, the results reflect that knowledge is a complicated, ambiguous and broad conception, is justified truth and belief, and can only be understood through an integrated perspective involving both philosophical, sociological and knowledge management discourse. Any interpretation of what knowledge is from a single aspect and without considering its philosophical and sociological meanings is preconception.

Keywords: Knowledge, Philosophy, Sociology, Knowledge Management Discourse

Introduction

Knowledge as a remarkable substance that has replaced capital is seen as the new driver of productivity and competitive competence (Drucker, 1993; Nicolini, Gherardi, & Yanow, 2003). But what is knowledge? According to Turban & Frenzel (1992 cited in Lilley, Lightfoot, & Amaral, 2004) knowledge is “information that has been organized and analyzed to make it understandable and applicable to problem solving or decision-making”. Similarly, Beckman (1997) argued that knowledge is “reasoning about information to actively guide task execution, problem-solving, and decision-making in order to perform, learn

and teach”. And also there are lots of writers and researchers have given the similar conclusions about relationship between data, information and knowledge: “information is data plus meaning and knowledge is information plus processing” (Simon, 1991; Alter, 1996). But, the question is, could we just such simple to interpret what is knowledge without a deep study about the notion of knowledge in philosophy, sociology and knowledge management discourse? The answer seems to be negative. Thus, this paper is going to explore what knowledge is through the study of philosophy and sociology and knowledge management discourse. Then, this paper is able to cross the ravine more

confidently and give the opinion about knowledge in the end.

Philosophical Bent

According to Ayer (1956 cited in Pears, 1971), the notion of knowledge is always a philosophical problem. We cannot talk about what knowledge is without a profound philosophical comprehension. Enquiries into the nature of knowledge from a philosophical angle has always been involved in the domain of epistemology or theory of knowledge. What is knowledge? This question, like many other philosophical questions, sounds very simple, but actually, it is extremely difficult to answer in detail. One of early philosophical perspective proposed that “knowledge is a state of mind which is either present or absent, just as fever is a state of the body which either present or absent”. But this simple answer did not seem to convince people as a whole and reasonable interpretation. Knowledge is unlike a fever. A person may have a fever without having idea that he has one. Whereas a person cannot have knowledge without having any idea that he knows it (Pears, 1971). Despite we may unconsciously know it, but we know it. Therefore, knowledge is not a state of mind. But what is knowledge? Is there any single conception we could just use to answer this question? Browsing the philosophical epistemology or theory of knowledge, unfortunately, there seems to be no simple answer for that. It is because there are so many various knowledges, and each of them has so many aspects which are very easy to

be ignored when trying to make an integrated definition of knowledge. In order to make sure that nothing is left, one way that philosophers suggested to do this is begin with a rough classification of knowledge (Pears, 1971). Lilley, Lightfoot, & Amaral (2004) summarized that since the nineteenth century, many writers and philosophers, such as George Edward Moore, Bertrand Arthur William Russell and Ludwig Joseph Johann Wittgenstein, has already started to attempt to explore the notions of knowledge and described three types of knowledge: factual knowledge, knowing how to do things and acquaintance. About a hundred years later, in the twentieth century, Pears (1971) further discussed the three kinds of knowledge in his philosophical essay.

Firstly, factual knowledge must be a meaningful and true statement based on adequate reasons rather than guesswork. And these reasons cannot be generated by natural mental state, they must be obtained from experience or consciousness in spite of people who may have no idea when or where they got those experience or consciousness (Pears, 1971). For instance, a person says that he knows that low bridge is safe. If we want to prove what he said is a factual knowledge, we have to make sure that his statement is correspondence with truth. When the low bridge is really safe, we can tell that he was stating a factual knowledge.

Next, Pears (1971) argued that although knowing how to do things was seen as having a straightforward connection with

factual knowledge, but actually, the connection between them is not working in the way we expected. For instance, if a person knows how to do something and he is also able to tell others how he does it, and when he tells other people, he is saying a factual knowledge. However, in many cases of knowing how to do things, “people’s aptitudes cannot be completely stored and internalized in symbolic form, possessing them simply consist in being able to respond to circumstances with the appropriate behavior” (Pears, 1971). Similarly, Polanyi (1967) also proposed his epigram: “we can know more than we can tell” (p4). In his early work, he expatiated that people know how to do things, but it does not mean they can explain everything to others of how they do it. Most of time, people are able to undertake a range of activities without being able to give a completely account of their actions (Polanyi, 1958 cited in Perraton & Tarrant, 2007). The famous Polanyi’s cycling example clearly demonstrated this trait of knowledge: we know how to ride a bicycle, but we cannot say how we do it. Therefore, knowing how to do things is not always connected with factual knowledge.

In the end, Russell mentioned that “acquaintance is knowledge that people can be immediately aware of via sense” (Lilley, Lightfoot, & Amaral, 2004). In other words, acquaintance is knowledge that people do not know they know at first, they need be told by others and then they can realize they know it. Moreover, Pears (1971) claimed that the best way to understand acquaintance is aware of

via its object. One can be acquainted with a person or a place, which is called as particulars, and others can be acquainted with general things, such as characteristics or relation, which is called as universals. For instance, in the theatre, if a person asks you which actor is taking a certain part, and you may name the actor. Alternatively, if the person asks you to describe a particular dancer, and you may describe the dancer by saying that she is the tallest one on the stage. Although in both of cases you are naming something, there is a certain different idea for questioner. The first case emphasizes on an individual or particulars and the second case stresses the characteristics of an individual or universals.

Sociological Bent

Knowledge in sociology is unlike knowledge in the philosophical world. Sociologists have different angle to treat knowledge in sociology. They are more like to interpret conceptions of knowledge through social meaning of knowledge rather than its nature (Burrell & Morgan, 1979; Gardner, 1987). Sociology of knowledge is a discipline which focuses on the relationship between knowledge and social context, so that sociological conceptions of knowledge are very close associated with social life and social class. As Karl Marx mentioned in his ideological conception, he saw knowledge is inevitably associated with the social relations and social classes which determined men’s consciousness (Lilley, Lightfoot, & Amaral,

2004). Although Marx did not write a book on the sociology of knowledge, many sociological conceptions of knowledge were extracted from Marx's work (Abercrombie, 1980). For example, Mannheim (1929 cited in Abercrombie, 1980) suggested that form of knowledge is not only determined by social classes but also is decided by social positions or similarity of location. And he also stated three tests for the legitimacy of something put forward as knowledge in his ontological theory of knowledge: "first, it must somehow perform the mastering and orienting functions of knowledge; Secondly, it must be authentically grounded in the being about which knowledge is claimed; Thirdly, it must have properties congruent with the structure of the systematization to which it belongs" (Mannheim cited in Kettler, Meja, & Stehr, 1984). And Foucault (1966 cited in Burke, 2000) discussed that the relation between knowledge and power at different levels, from the micro level to macro level, from family to state, while analyzed the various site of knowledge. But the subject of knowledge was not only discussed by Germany school in the early of twentieth century. In France, Durkheimian and his follower, Marcel Mauss, studied that social origin of fundamental categories, such as space and time, the category of person and so on, those are fundamental knowledge that people do not know they hold them (Durkheim & Mauss, 1901 cited in Burke, 2000). Marc Bloch and Lucien Febvre produced famous analysis of collective mentalities and argued about

problem of unbelief (Burke, 2000). In the USA, Thorstein Veblen was concerned with the relation to knowledge of specific social groups and institutions. His article argued that the rise of industry and machine technology bring modern cult of science that caused impersonal explanations instead of anthropomorphic ones in the modern civilization.

The study of social history of knowledge is one of the most important ways to understand the development of knowledge in sociology. As Aristotle said, that "understanding how a thing has developed from primitive beginnings helps us to understand it in its developed form" (Pears, 1971). In other words, if we want to understand and cognize what knowledge is in the contemporary society, we have to go back to the social history of knowledge to dig the origin of knowledge in sociology. Through studying perspectives of different schools about the relationship between knowledge and social context in history, we are able to find out what sociological meaning of knowledge truly is. Just like sociologists stressed, that "the study of sociological conception of knowledge is always accompanied with study of the history of idea" (Lilley, Lightfoot, & Amaral, 2004).

In addition, the sociological meanings of knowledge are plurality and can be divided into many sub-groups (Berger & Luckmann, 1966), but sociological meanings of knowledge does not exist on their own. Bloor (1997 cited in Rodriguez-Lluesma & Bailey, 2005)

interpreted the relationship between knowledge and social context, and proposed that knowledge of many social objects is constituted by mutual reference in the social life. For instance, a note is nothing more than a printed paper. We know all about knowledge of a note is that it as a piece of paper has materials properties, such as weight, shape, and so on, which are instances of its physical knowledge. However, if we turn a note into money, the social meaning of knowledge would be embedded in the meaning of the piece of paper. Through using the piece of paper as a common measure of value for comparing different things, people make money be money. There is no material property of the piece of paper that can make it be money but social agreement. Therefore, there is money, it is because we treat it as money, otherwise, it just a piece of paper. Today, much knowledge has this trait, and it is usually seen as the sociological meaning of knowledge.

Back to Knowledge Management Discourse

Jumping out of philosophical and sociological morasses, and getting back to standpoint of knowledge-based value and knowledge management literature. Comparing with the notion of knowledge in both worlds of philosophy and sociology, researchers and practitioners in the knowledge management discourse seem to be more interested in discussion regarding the value of use of knowledge (Alavi & Tiwana, 2003; Alvesson, 2004; Aurum, Daneshgar, & Ward, 2008;

Blackler, 1995). There are a sea of perspectives in the organizational theory has indicated the various classification of knowledge and how to manage knowledge in different organizational contexts during recent two decades (Brown & Duguid, 2001; Grant, 1996). Nonaka & Takeuchi (1995) divided knowledge into explicit and tacit knowledge: explicit knowledge is knowledge that can be expressed in words and numbers, and easily communicated and shared in the form of hard data or codified procedures; tacit knowledge is the knowledge that cannot be easily articulated and codified into files, and only exists in people's brain and organizational practice. And they also proposed that knowledge can be transferred from tacit to tacit through socialization, which is a process of sharing experience that creates and passes tacit knowledge from person to person, such as traditional apprenticeship; from tacit to explicit through externalization, which is a process of sharing of "metaphors", "analogies", "models", or "stories" (Nonaka, 1994) during collective discussion to convert tacit knowledge into explicit knowledge; from explicit to explicit through combination, which is a process of reconfiguration of a number of explicit knowledge to produce new explicit knowledge, such as the learning in school; and from explicit to tacit through internalization, which is a process of assimilating explicit knowledge into individual's style and habit (Nonaka & Takeuchi, 1995). Choo (1998), based on Boisot's typology of knowledge, suggested

a differentiation between tacit, explicit and cultural knowledge in the organizational context. In his words, that “tacit knowledge is the implicit knowledge used by organizational members to perform their work and to make sense of their worlds; “explicit knowledge is the knowledge can be expressed formally using a system of symbols, and can therefore be easily communicated or diffused; and “cultural knowledge consists of the cognitive and affective structures that are habitually used by organizational members to perceive, explain, evaluate, and construct reality” Blackler (1995), elaborating on Colilns’s speak of embodied, embedded, embrained, encultured and encoded knowledge. He pointed out that “embrained knowledge is knowledge that is dependent on conceptual skills and cognitive abilities; embodied knowledge is action oriented and is likely to be only partly explicit; encultured knowledge refers to the process of achieving shared understandings; embedded knowledge is knowledge which resides in systemic routines; encoded knowledge is information conveyed by signs and symbols, such as books, manuals and so on”.

Although there are still some other ways to understand and classify knowledge in the knowledge management discourse, they all more or less are affected by Poanlyi’s work about tacit knowing. The original concept of tacit knowledge lie in Ryle’s distinction between knowing how and knowing that (Perraton & Tarrant, 2007). Polanyi (1967) further developed this concept in his work

and explained that knowledge has both of proximal and distal properties, and proximal is the part that is closer to us while distal properties is the part that is further away. For example, if a witness wants to recall face of suspect, usually, he or she has to do that with help of photo-fit picture. Through paying attention on closer image that reside within him or her, and then transfer attention to distal picture collection, the witness is able to communicate her or his awareness of the face. Nevertheless, Polanyi did not claim that knowledge should be clearly divided into tacit knowledge and explicit knowledge, on the contrary, he emphasized that “tacit knowledge and explicit knowledge are not sharply divided. While tacit knowledge can be possessed by itself, explicit knowledge must rely on being tacitly understood and applied. Hence all knowledge is either tacit or rooted in tacit knowledge. A wholly explicit knowledge is unthinkable” (Polanyi, 1969). In other words, tacit and explicit are two sides of a line, and they are mutually coexistence rather than two separate parts. Explicit knowledge is always based on tacit component, and tacit knowledge is the source of all knowledge. As Vosburgh & Newbower (2000 cited in Edmondson et al., 2003) said, that “difference between tacit knowledge and explicit knowledge is temporary, much explicit knowledge was tacit in the past”. Perhaps the commonly used tacit-explicit distinction is that subsequent commentators misunderstood Polanyi’s work.

Conclusion

Knowledge is a complicated, ambiguous and broad conception. It is very difficult to explain in detail. Any interpretation of what knowledge is from single aspect seem to be a bit of preconception. Merely depending on the study of one academic domain to understand knowledge is not enough for us to have a whole insight about what knowledge is. Knowledge is like an intangible substance that has existed in the history of human civilization for several thousand years (Alvesson, 2004; Haesli & Boxall, 2005; Hislop, 2009). In the different periods of history, countries and cultures, knowledge is given different definitions and interpretations. Today, in the different academic domains, people still have different ideas to understand and interpret what knowledge is in terms of their own understanding. According to the above analysis, we can see that knowledge in philosophy is human thought that comes from factual experience, potential consciousness or acquaintances, which is used by human beings to cognize and interpret the world they live in, the environment around them and the things they see. Nevertheless, only this rough classification of knowledge seems to be not enough for us to provide an integrated notion of knowledge, after all, knowledge is not a thing that only exists in the philosophical world. Knowledge is an ambiguous and extremely broad notion that is associated with different domains (Earl, 2001; Jashapara, 2000).

In sociology, knowledge is seen as a common social agreement that is decided and accepted by the entire social community and offers a common standard for values and conceptions of society (Newell et al., 2009; Orlikowski, 2002; Orr, 1996). In other words, in order to avoid sinking into various complicated interpretations about the details of some events or things, people created common conception and standard of values for convenience of communication. Such as the word “profit” is a common notion in society that was created to make our communication easier and more convenient when we talk about investment income. If someone tells you that profit of investment is high without any detailed description of what profit is, you know this investment will earn lots of money rather than lose money. The “profit” represents the meaning of positive investment income that has been acknowledged and accepted by entire society for ages. And we do not have to explain what “profit” is or why we call it “profit”, because it is not necessary. This is what we call sociological conception of knowledge, which presents the relationship between knowledge and social context. It is very important and cannot be replaced by its philosophical definition.

Moreover, knowledge in the knowledge management literature is even more different from philosophy and sociology. Interestingly, knowledge management discourse focuses on the classification of tacit knowledge and

explicit knowledge, and how to manage them in an organizational context (Cook & Brown, 1999; Schultze & Stabell, 2004; Spender, 1996). But it did not mention anything about what knowledge really is before it talks about managing knowledge. Seemingly, today's management researchers have assumed that the notion of knowledge is a kind of common sense, it is already out there and everybody knows it; or what is knowledge seems not to be a concern of management researchers. How inconceivable is that? Talking about knowledge management without an explanation about what knowledge is. Whatever the reason is, it does not seem matter here. The important thing here is to present that the notion of knowledge is not clearly interpreted in all three academic domains but the notion of knowledge is deeply embedded in these three domains. Therefore, this is mainly the reason why I suggest below that knowledge should be understood and interpreted through an integrated approach.

Interpreting the notion of knowledge is not a thing we can do in a micro level or single academic domain, we have to look at knowledge from a macro level or the big picture to explore what it is. Knowledge does not seem to be a straightforward concept that we could just answer simply. Any notion or interpretation of knowledge from a single academic domain cannot represent an integrated conception of knowledge. What is

knowledge? The question sounds simple and it is difficult to answer. There is no simple answer from epistemology of philosophy, sociology of knowledge or knowledge management discourse. Perhaps the best way to go is to interpret the notion of knowledge through linking philosophical notions of knowledge with sociological conceptions of knowledge and meanings of knowledge in the knowledge management literature.

Concluding above statement, after separately analyzing what knowledge is in the philosophy, sociology, and knowledge management discourse, the vital concern of this paper is concentration on the debate that the notion of knowledge is an intrinsically ambiguous and equivocal term. Answering what is knowledge merely depend on viewpoint of single academic domain, it is not enough for us to understand the notion of knowledge in our world. Thus, this paper suggests that, in order to better understanding knowledge and its management in the modern world, an integrated notion involving both philosophy, sociology and KM discourse is considered as necessary. Otherwise, without philosophical and sociological concerns of knowledge, any claim of what knowledge is and how to manage it, they are all one-sided account and is lack of credibility.

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