

Epistemology and Knowledge Management

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INTRODUCTION

This article surveys and explores the relationship between epistemology and knowledge management (KM). Epistemology is the branch of philosophy concerned with the nature and extent of human knowledge (Klein, 1998b). Knowledge management is clearly deeply indebted to many ideas derived from epistemology. Much of the seminal work in KM discusses epistemology in a fair amount of detail, and explicitly appeals to insights from epistemology in developing a theoretical account of KM. In particular, the groundbreaking works by Sveiby (1994, 1997, 2001), Nonaka (1994), and Nonaka and Takeuchi (1995) make explicit appeal to the philosophical insights in epistemology, which has provided the groundwork for much of their pioneering work in knowledge management. One would thus expect there to be a fairly intimate connection between epistemology and knowledge management. The relationship between these two fields, however, is far from straightforward.

This article argues that traditional philosophical discussions about epistemology are generally quite limited in their application to KM. This is because they focus mainly on the production of individual or personal knowledge, rather than sharing and use of knowledge in a collaborative context. Thus many of the insights from traditional epistemology are largely irrelevant for the enterprise of KM.

There are, however, recent developments in epistemology which seem more promising for KM. This article ends with a brief overview of some of these developments, looking at recent work in both the philosophy of science and social epistemology. These approaches seem extremely promising for developing a sounder philosophical and methodological basis for KM.

BACKGROUND: KNOWLEDGE IN EPISTEMOLOGY

Epistemology—the theory of knowledge—is one of the core branches of philosophy. It is concerned with exploring the nature, sources, and limits of human knowledge (Klein, 1998a). With a history tracing back to Plato and Aristotle, the field of epistemology has attempted to

provide an analysis of *what* the concept of knowledge is—a definition of knowledge. Epistemology also attempts to specify what *legitimizes* knowledge, so that we can distinguish genuine knowledge from false or spurious knowledge. To a lesser degree epistemologists have also inquired into *how* we acquire knowledge, and whether there are limitations on the scope of our knowledge (Pappas, 1998). Some have even adopted a position of extreme *scepticism*, claiming that genuine human knowledge is impossible (Cohen, 1998).

The focus of contemporary debates in epistemology essentially traces back to the work of Descartes and his method of doubt. In his *Meditations on First Philosophy*, Descartes (1640) undertakes an inquiry into the nature of knowledge. Here Descartes attempts to find the foundational principles upon which our knowledge rests, by trying to identify some sort of fact that we can be entirely certain of. Thus he advocates that we need “to demolish everything completely and start again right from the foundations” (Descartes, 1996, p. 12). For Descartes the real challenge here is scepticism—if there is any possibility of doubt about so-called knowledge being true, then it cannot be genuine knowledge. Descartes’ inquiry tries to ascertain just what facts about the external world are beyond scepticism, in order to discover the basis of all our knowledge. Following this methodology Descartes famously arrives at the proposition “*cogito ergo sum*”—I think, therefore I exist—which he claims puts the proposition “I exist” beyond doubt. Contemporary epistemology has followed strongly in this Cartesian tradition, focusing on the question of the justification of knowledge in the face of scepticism. Because of this, questions about the actual generation of knowledge, and of the uses and contexts of knowledge, have been of peripheral concern for the majority of theorists in epistemology.

In this respect, epistemology has typically defined knowledge as an essentially *personal* item that concerns true facts about the world: knowledge is an individual’s *true, justified belief*.¹ Additionally, the majority of research in epistemology has generally been concerned solely with *propositional* knowledge: factual knowledge that can be expressed in a sentence, and can be evaluated for truth or falsehood. Thus traditional approaches to epistemology are concerned primarily with *what* knowledge is and how it can be identified, rather than *how* knowledge is created or used.

KM AND EPISTEMOLOGY

The traditional approach to defining knowledge in epistemology contrasts markedly with the definitions typically proposed in the KM literature. For example, Rumizen defines knowledge as “Information in context to produce actionable understanding” (Rumizen, 2002, pp. 6, 288). Similarly, Davenport and Prusak define knowledge thus:

Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. In organisations, it often becomes embedded not only in the documents or repositories but also in organisational routines, processes, practices, and norms. (1998, p. 5)

These definitions do not view knowledge as essentially personal, true, justified belief, but instead have a notion of knowledge as a practical tool for framing experiences, sharing insights, and assisting with practical tasks. For KM, knowledge is something other than just an individual’s understanding of the true facts of the world—it is a *pragmatic* tool for manipulating and controlling the world. It is in this sense that Iivari proposes that knowledge is communal, activity-specific, distributed, and cultural-historical (Iivari, 2000).

Compared to traditional epistemology, KM focuses not so much on the justification knowledge, but instead on understanding the uses of knowledge in order to effectively deal with the practical tasks that involve knowledge-based activity. Thus KM is primarily concerned with knowledge as it is generated, shared, stored, and used within a collaborative environment. KM is also concerned with *all* aspects of knowledge within an organisational framework: the *factual* knowledge of the individuals within the organisation, as well as their *practical* knowledge, *tacit* knowledge, and *technological* knowledge. Thus for KM, knowledge must be far more than just personal certainty about the world—it must involve practical ability as well as conceptual understanding. More importantly, KM is concerned with far more than just the justification of knowledge—it is concerned with the production, storage, and processing of knowledge in a group or shared sense. Thus the relevance of the concept of knowledge for KM is quite different to its relevance for philosophers.

The important point here is that, as far as KM is concerned, there are significant limitations in traditional approaches to epistemology. Traditional epistemology is not concerned with the production and processing of knowledge in a group or shared sense—it is not really concerned with the *pragmatics* of knowledge production

and use. The main issue in epistemology is the status of the final product rather than the process of getting there and what happens after knowledge is acquired. Yet these are precisely the factors that are of interest for KM.

The upshot of this is that, beyond an initial analysis of what knowledge is, the traditional approach to epistemology offers very little in the way of useful insights for KM. Epistemology may offer some assistance when dealing with some forms of explicit knowledge, but beyond that it is of little use. Thus we must look beyond standard epistemology to find useful contributions from philosophy.

On the other hand we also should not stray too far from standard epistemology: KM should not dismiss the importance of the insights of traditional epistemology into the nature of knowledge. Although the different disciplines have fundamentally different interests in the concept of knowledge, the concepts in each discipline are still very closely related. The standard approach in epistemology may be too limited and too narrow for KM, but it also is not totally irrelevant. At its foundation the KM conception of knowledge should at least be *compatible* with the epistemological definition, since even though the disciplines have different interests in the concept, at its base it is still essentially the same idea. Factual, tacit, practical, technical, and other forms of knowledge must still all meet certain criteria in order to be genuine knowledge: they must correspond to some aspect of the world, accurately reflect a reliable way of manipulating the world, and stand up to the harshest of pragmatic tests. Although precisely what it takes to meet these criteria is the topic of vigorous debate, it is clear that genuine knowledge must have some standards.

FUTURE TRENDS: RELEVANT PHILOSOPHICAL INSIGHTS FOR KM

This article has argued that traditional epistemology can only be of limited use to KM since it focuses on the origins and justification of personal knowledge, rather than the pragmatics of knowledge use, sharing, and dissemination. Since KM is primarily concerned with knowledge as it is generated, shared, stored, and used within a collaborative environment, if we are to look to epistemology to provide a foundation for the tasks of KM, we must look for those areas that can deal with these practical issues, as well as provide insights into these differing forms of knowledge and the relationships between them. The philosophical theory must also help our understanding of the underlying *processes* that are relevant for KM.

The suggestion here is that the most fruitful places to look for relevant philosophical insights for KM is in recent work in both the *philosophy of science* and the emerging

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