

Chapter 5

Practice vs. Possession: Epistemological Implications on the Nature of Organizational Knowledge and Cognition

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ABSTRACT

Organizational knowledge is at the center of the debate focused on the nature of knowledge, where the perspective of knowledge as possession opposes the perspective of knowledge as practice. These two views are rooted in the radical versions of realist and constructivist epistemology, respectively, according to which knowledge is an object or a practice. Far from being a Byzantine dispute, the adoption of one or the other has relevant and concrete consequences for the design and management of IS/IT, because as such, the two paradigms result incommensurable in both theoretical and methodological aspects. However, from a moderate and middle-ground version the following fruitful implications would stem: 1) the juxtaposition would dissolve, and a dual nature of knowledge as object and practice would emerge; 2) the epistemology of pragmatism would be able to account for all the concepts and methods employed by the two fronts, thus terminating a sterile “paradigm war”; 3) the theory of autopoiesis would become irrelevant and eventually even misleading; 4) standard scientific methodologies and simulation models would be acknowledged as useful and common tools for progressive confrontations among the supporters of both the paradigms; 5) the development of IS/IT studies and the design of knowledge management systems would substantially benefit.

DOI: 10.4018/978-1-4666-0179-6.ch005

1. INTRODUCTION

The classic view on knowledge grounds on the research program of artificial intelligence (Minsky, 1987; March & Simon, 1958; McCorduck, 1979; Newell & Simon, 1972; Simon, 1969, 1977, 1997), and dominates the scientific landscape still now. Accordingly, knowledge is a set of information, which can, more or less hardly, be stored and transferred between people and organizations. Intelligence and knowledge are obtained through symbols manipulation and basically coincide with computation. This view started with the foundation of artificial intelligence, and the shift of some developments from the strong to the weak program – that is, from the central to the distributed processing – does not change the essence very much. Accordingly, individuals and organizations are information processors, and there is no any fundamental distinction between data, information and knowledge, if not that they can be human-embodied, when possessed by people, or machine-embodied, when stored as datasets or entrapped in the meaning or usability of goods. Some types of knowledge - namely, the tacit forms - are eventually hardly transferable, because its codification consumes too many resources, so that it is transferred more effectively by imitation and cooperation. However, in this classic view it is argued that this difference between tacit and explicit knowledge is based on economic convenience (Amin & Cohendet, 2004; Cowan, 2001; Cowan *et al.*, 2000; Cowan & Foray, 1997), and not on some ontological distinctions. Within and between organizations, all these forms of knowledge are produced and transferred along with data and information, which are supposed to be the raw, sensory-shaped, and not-yet interpreted forms of knowledge¹. In this standard perspective, cognition refers to the ability to treat information eventually (but not necessarily) through symbols. A cognitive system can be an information processor, whose objects could be knowledge and information, entities separable

from its creators and transferable between the users. This classic view is still the far dominant one, and can be easily recognized – in an explicit or implicit expression – in most papers dealing with IS/IT, knowledge management systems (KMS), as well as in almost all the fields of organization and management science.

From the eighties and in various ways many scholars (Brown & Duguid, 1991, 1998, 2000; Cook & Brown, 1999; Lave, 1988; Lave & Wenger, 1992; Maturana & Varela, 1980, 1987; Mingers, 1995; Orlikowski, 2002; Tsoukas, 1996, 2005; Varela, 1979, 1992; Varela *et al.*, 1991; von Foerster, 1982; von Glasersfeld, 1995; von Krogh, Roos & Slocum, 1996; von Krogh, Roos & Kline 1998; Weick, 1969, 1995; Wenger, 1998; Winograd & Flores, 1986; Yolles, 2006; Zeleny, 2000, 2005) challenged that view by arguing that knowledge has a radically different nature with respect to data and information. Accordingly, knowledge tout-court (and not only its tacit forms) cannot be considered as a storable or transferable object, and eventually, it is not considered as an object at all, and cannot be separated from its creators, i.e., human beings. In fact, it is argued that machines can process information but not knowledge, which is produced by humans through interactions during their practices. In this view, cognition, at least in its highest sense, signifies the ability to do something, and knowledge has an unavoidable tacit dimension, eventually occurring in combination with the explicit dimension. Moreover, for practices that are performed socially, individual knowledge cannot be separated from its collective nature.

These two perspectives have been presented as an epistemology of possession vs. an epistemology of practice, respectively (Cook & Brown, 1999). According to the former, databases, routines, codebooks, and books are all forms of knowledge, and the efficiency of organizations depends to some extent on just the size, appropriateness, and management of organizational knowledge. In the most “enlightened” (recent) approaches

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