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INVESTIGATING THE “KNOWLEDGE” IN KNOWLEDGE MANAGEMENT: A SOCIAL REPRESENTATIONS PERSPECTIVE

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Introduction

Organizations are increasingly recognizing the important role that knowledge plays in strategy and operations, and organizational leaders are seeking ways to better manage their so-called *knowledge assets*. However, knowledge is intangible and symbolic “matter” that is difficult to define explicitly. Organizational leaders’ attempts to manage knowledge typically rely on tacit, social representations of knowledge and what it means to manage it. Even the academic literature on knowledge management has no clear definitions of knowledge (e.g., Spender 1996); instead, metaphorical definitions are apparent (e.g., Schultze and Leidner 2002).

The central role of social representations of knowledge and of knowledge management (KM) creates a number of challenges for practice and research. First, KM initiatives become moving targets, both within organizations and in the organizational field that includes information technology vendors and consultants, as technological applications and metaphorical representations of knowledge and of KM practices shift over time. Second, social representations of knowledge are created, maintained, and dispersed through community discourse: community-wide and locally bounded representations are influenced by how people talk about knowledge subjects. Third, the KM field has acknowledged the social nature of knowledge but has yet to fully appreciate that knowledge may not be consensual. That is, different communities (e.g., occupational communities such as marketers or engineers) tend to represent the same object differently (e.g., a new product to develop). Fourth, differences in the social representations of different communities make it difficult to effectively transfer knowledge across community boundaries. Knowledge management systems (KMS) have often been presented as tools to facilitate such knowledge transfers. Boundary-spanning mechanisms that deal with the differences in social representations are needed to facilitate effective knowledge sharing across communities.

In this panel, we will draw on Serge Moscovici’s theory of social representations to address these knowledge management challenges. Moscovici introduced and popularized the concept of social representations in the field of social psychology. His early definition of social representation is that of “the elaborating of a social object by the community for the purpose of behaving and communicating” (1963, p. 251). Social representations correspond to a socially shared set of common knowledge and ideas that agents elaborate and communicate to make sense of and act in their environment (Jodelet 1989b; Moscovici 1973, 1984; Vaast and Walsham 2005). Moscovici’s goal was to rehabilitate the ways that social psychologists understood common thinking and common knowledge. Common knowledge was usually considered to be inferior to scientific knowledge; however, Moscovici considered it to be an active and complex social reflexive process. To this end, he studied social representations as important phenomena (i.e., their structure and dynamics, and their role in language, communication, and understanding).

The concept of social representations has been used to investigate common knowledge in society as a whole on issues such as illnesses, gender, and aggression (Flament 1994; Jodelet, 1989a). It has also increasingly been used to investigate shared

knowledge among members of smaller groups, such as professional groups or minorities (e.g., Allard-Poesi 1998; Laroche 1995; Pawlowski et al. 2004; Singery 1989; Walmsley 2004). Taking our cue from this prior research, our panel will apply Moscovici's theory of social representations to challenges in knowledge management research and practice in the following way:

Introduction to KM Challenges and Social Representation Theory: Dick Boland will introduce the panel by discussing the four aforementioned challenges to the KM field and by presenting an overview of the social representations perspective.

Representing Knowledge and Knowledge Management: To understand how the social representations of knowledge and of knowledge management have evolved—despite the absence of a clear definition of knowledge—in this segment of the panel, Ulrike Schultze will provide a brief historical overview of knowledge management technology starting in the 1970s with the expert system MYCIN and ending with the collaborative filtering technologies used for generating recommendations today. The analysis will pay particular attention to the language used to define the knowledge management problem and its solution in each decade, so as to determine the social representation of knowledge and what it means to manage it through the evolution of these concepts.

The Discursive Nature of Knowledge: In this segment of the panel, Elizabeth Davidson will discuss the discursive nature of knowledge by linking the theory of social representations to the theoretical concepts of technological frames (Orlikowski and Gash 1994) and dynamic framing (Davidson 2002). She will illustrate how social representations are embedded in frames and how they are anchored and objectified as metaphors and narratives, some of which are widely diffused within a business community or profession and some of which are localized within organizations. She will discuss the dynamic processes through which social representations take shape in conversation and discourse, stabilize (or diverge) through practice, and facilitate (or inhibit) knowledge sharing and preservation. Elizabeth will also highlight the challenges that metaphorical and narrative forms of social representations present to knowledge management initiatives and to the use of information technologies in KM practices.

Questioning the Consensual Nature of Knowledge: The KM literature has acknowledged the social nature of knowledge. Yet, this acknowledgment is often accompanied by an implicit assumption that knowledge is—or can become—the same across communities. The social representations perspective questions this assumption as well as another assumption often made in the KM field; the idea that communities of experts are the ones who “know” and that, therefore, communities of laymen should learn from experts and gain experts' knowledge rather than develop their own common knowledge. In this segment of the panel, Emmanuelle Vaast will illustrate these two points by discussing how different occupational communities working in a healthcare organization represented information security. Her presentation will exemplify the usefulness of the conceptual and methodological tools provided by the social representations perspective.

A Structural View of Social Representations: Suzanne Pawlowski will illustrate the use of social representations theory and methods to deepen our understanding of the role boundary objects play in providing a boundary infrastructure to manage knowledge across practice boundaries. She will propose a structural analysis of social representations that holds implications for two crucial characteristics of boundary objects: common identity and interpretive flexibility (Star 1989). With respect to knowledge management, how do boundary objects facilitate a process of transformation to produce more shared knowledge at practice and knowledge boundaries (Carlile 2002)? Suzanne will provide an overview of the structural aspects of social representations theory and describe one method that can be used to identify core and peripheral elements (see Pawlowski et al. 2004), with specific application to boundary objects.

About the Authors

Richard Boland is a professor at Case Western Reserve University. He was founder and editor of the research journal *Accounting, Management and Information Technologies* from 1990 to 2001, now renamed *Information and Organization*. Professor Boland's research concerns how individuals experience the process of designing and using information systems in organizations.

Elizabeth J. Davidson is an associate professor at the University of Hawaii, Manoa. In her research, she has examined socio-cognitive processes through which organization members conceptualize opportunities for using information technology (IT), negotiate understandings and definitions of IT applications, and orchestrate IT development initiatives.

Suzanne Pawlowski is an assistant professor at Louisiana State University. She earned her Ph.D. in CIS from Georgia State University. Her primary research interests focus on the relationship between IT and knowledge in organizations, with emphasis on knowledge boundaries, sensemaking, and social theories of learning. A second research interest is job-related stress and burnout in IT.

Ulrike Schultze is an associate professor in Information Technology and Operations Management at Southern Methodist University. Her research focuses on the impact of information technology on work practices and she is particularly interested in knowledge work, specifically the social processes of creating and using information in organizations.

Emmanuelle Vaast is an assistant professor in Management of Information Systems at Long Island University. She earned her Ph.D. in MIS from Ecole Polytechnique, Paris, France. Her research questions how the social dynamics of communities and networks are related to their members' practices and representations of organizations and information systems.

References

- Allard-Poesi, F. "Representations and Influence Processes in Groups: Toward a Socio-Cognitive Perspective on Cognition in Organization," *Scandinavian Journal of Management* (14:4), 1998, pp. 395-420.
- Carlile, P. R. "A Pragmatic View of Knowledge and Boundaries: Boundary Objects in New Product Development," *Organization Science* (13:4), 2002, pp. 442-455.
- Davidson, E. J. "Technology Frames and Framing: A Socio-Cognitive Investigation of Requirements Determination," *MIS Quarterly* (26:4), 2002, pp. 329-359.
- Flament, C. "Pratiques sociales et dynamiques des représentations," in *Pratiques sociales et représentations*, J. C. Abric (Ed.), Presses Universitaires de France, Paris, 1994, pp. 43-58.
- Jodelet, D. *Folies et représentations sociales*, Presses Universitaires de France, Paris, 1989a.
- Jodelet, D. (Ed.). *Les représentations sociales*, Presses Universitaires de France, Paris, 1989b.
- Laroche, H. "From Decision to Action in Organizations: Decision-Making as a Social Representation," *Organization Science* (6:1), 1995, pp. 2-75.
- Moscovici, S. "Attitudes and Opinions," *Annual review of Psychology* (14), 1963, pp. 231-260
- Moscovici, S. "Foreword," in *Health and Illness: A Social Psychology Perspective*, C. Herzlich (Ed.), Academic Press, London, 1973.
- Moscovici, S. "The Phenomenon of Social Representations," in *Social Representations*, R. M. Farr and S. Moscovici (Eds.), Cambridge University Press, Cambridge, UK, and Editions de la Maison des Sciences de l'Homme, Paris, 1984.
- Orlikowski, W. J., and Gash, D. C. "Technological Frames: Making Sense of Information Technology in Organizations," *ACM Transactions on Information Systems* (12:2), 1994, pp. 174-207.
- Pawlowski, S. D., Kaganer E. A., and Cater J. J. "Mapping Perceptions of Burnout in the Information Technology Profession: A Study Using Social Representations Theory," in *Proceedings of the 25th International Conference on Information Systems*, R. Agarwal, L. Kirsch, and J. I. DeGross (Eds.), Washington, DC, 2004, pp. 901-913.
- Schultze, U., and Leidner, D. E. "Studying Knowledge Management in Information Systems Research: Discourses and Theoretical Assumptions," *MIS Quarterly* (26:3), 2002, pp. 213-242.
- Singéry, J. "Représentations sociales et projet de changement technologique en entreprise," in *Pratiques sociales et représentations*, J. C. Abric (Ed.), Presses Universitaires de France, Paris, 1994, pp. 179-216.
- Star, S. L. "The Structure of Ill-Structured Solutions: Heterogeneous Problem-Solving, Boundary Objects and Distributed Artificial Intelligence," in *Distributed Artificial Intelligence Volume 2*, M. Huhns and L. Gasser (Eds.), Morgan Kaufman, San Mateo, CA, 1989, pp. 37-54.
- Spender, J. C. "Making Knowledge the Basis of a Dynamic Theory of the Firm," *Strategic Management Journal* (17:Special Issue), 1996, pp. 45-62.
- Vaast, E., and Walsham, G. "Representations and Actions: The Transformation of Work Practices with IT Use," *Information and Organization* (15:1), 2005, pp. 65-89.
- Walmsley, C. "Social Representations and the Study of Professional Practice," *International Journal of Qualitative Methods* (3:4), 2004, pp. 1-18.