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## PAPERS TO READ TWICE: SPECIAL ISSUE ON UNDERSTANDING REFLECTION IN THE DESIGN OF INFORMATION SYSTEMS

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his special issue on "Understanding 'reflection' in the design of information systems," edited by Mike Metcalfe, includes four papers that merit a careful reading by researchers interested in research on IS development.

Lynch and Metcalfe (2006) open the special issue with a review of the reflection literature, seeking to differentiate between intuitive reflection and the employment of explicit concepts to reflect on sensory experiences. The paper provides evidence of the usefulness of differentiating between intuitive and conceptual reflection for IS research, and provides guidance for the use of conceptual reflection in research.

Say Lynch and Metcalfe (2006) about reflection: the "passage of time can be a millisecond or many years." In the face of a dangerous predator, intuitive reflection may be warranted, but in complex social contexts, a long hiatus may be in order to reflect on the meaning of an experience.

In the second paper, Metcalfe (2006) continues, focusing on the connection between concept, observation, and reflection. The basic idea of conceptual reflection involves selection of the appropriate concept, against which to reflect on sensory experience, but what of the circumstances (most always) where there are contradictions among employable concepts, e.g., handguns facilitate crime vs. handguns deter crime?

Information systems are based on organizational concepts, e.g., production, choices, firm value maximization,

understanding, etc. For each of these concepts there are others with which they have some level of inconsistency or conflict, e.g., social good, duty, trade secrecy, etc. Metcalfe argues that system designers should reflect on contradictions among concepts. Irony, dissimilarities, contradictions, paradox, and humor may provide the system designer with pragmatic tools to improve system design.

List (2006) extends the concept of reflection to include reflection on the future. At first thought this seems possible only in some imaginary science fiction world. So, how can the concept be made meaningful in the pedestrian world of IS development? List uses a dictionary definition of reflection, "the art of turning experience into learning." Of course, one cannot directly experience the future, however one can apply experience from the past to explore future states.

The paper continues with a case study exploring a reflection as comparison model to gather and analyze data about a proposed community information system. The case makes sense of the concept of reflection on the future. Perhaps IS development inherently involves reflection on the future?

Nielsen and Madsen (2006) use storytelling theory to gain insight into how to gain and share development knowledge across projects. They use the case of a "project reflection workshop" at AstraZeneca to illustrate storytelling as a knowledge sharing technique and suggest a story creation, knowledge sharing, and sharing workshop design. The design includes modes for "conversion of experience into stories,"

"articulation of stories," "collective negotiation and understanding," and "codification of explanations."

## REFERENCES

- List, D. "Reflection on the Future: Its Possibility and Usefulness," *Journal of Information Technology Theory and Application (JITTA)*, 7:4, 2006, 23-36.
- Lynch M. and M. Metcalfe, "Reflection, Pragmatism, Concepts and Intuition," *Journal of Information Technology Theory and Application (JITTA)*, 7:4, 2006, 1-11.
- Metcalfe, M. "Contradictions, Decentring and Reflection," *Journal of Information Technology Theory and Application (JITTA)*, 7:4, 2006, 13-21.
- Nielsen, L. and S. Madsen, "Using Storytelling to Reflect on IT Projects," *Journal of Information Technology Theory and Application (JITTA)*, 7:4, 2006, 37-49.