

The Snake and Ladder Game: Generating Metaphor and Meaning in the Information Systems Classroom

TREO Talk Paper

Divakaran Liginlal
Carnegie Mellon University
liginlal@cmu.edu

Abstract

Lakoff and Johnson (2003) argue that our conceptual system is fundamentally metaphoric. Metaphors are devices for seeing something in terms of something else. They bring out the “thisness” of that or the “thatness” of this (Burke, 1945). Because they are really about thought and not language, metaphors are not limited to the realms of linguistic studies or language classrooms. They have been, and continue to be, used extensively in the information systems (IS) field. Some examples of such metaphors are WORKSPACE IS A DESKTOP in interaction design (Saffer, 2005), COMPANIES ARE LIVING ORGANISMS and FORWARD MOVEMENT in e-commerce (Ahmad et al., 2017) and HIERARCHY OF NEEDS in organizational studies. However, studies dedicated to an understanding of metaphor usage in IS research, practice, and teaching seem to be sparse. The IS classroom will benefit from metaphoric thinking practices, especially in clarifying and further developing ideas and in fostering critical thinking skills. Such thinking practices can also spur creativity. It is well-known that some of the most important scientific, philosophical, and technical insights were first achieved in poetic or imaginative forms well before they surfaced as a new empirical discovery, conceptual principle, or useful invention (Pollio, 1986). Thus, analogies of the solar system to develop a model of the atom, evolution theory based on a living tree, swimmers advised to “press against the water for leverage,” or discovering “magic bullets” are real life examples. In the software engineering classroom, common metaphors that we use include that of BUILDING ENGINEERING to conceptualize architecture, design patterns, and agility (McConnell, 2004) and the WATERFALL and the SPIRAL to conceptualize the development process. This author (and perhaps others) has used the SNAKE AND LADDER metaphor to teach risk management in software development and has found it to be a very effective and engaging device. The proposed research aims to understand the practice of metaphoric thinking in the IS classroom through interviewing IS faculty, developing and analyzing a corpus of usage of metaphors in IS textbooks, and documenting related best practices. Moving further along, the research would involve controlled classroom experiments directed toward understanding how metaphoric thinking is useful in developing critical thinking and design thinking skills in IS students.

References

- Ahmad, R., Torlakova, L., Liginlal, D., & Meeds, R. (2017). Figurative Language in Arabic E-Commerce Text. *International Journal of Business Communication*, 2329488416688216.
- Burke, Kenneth. *A Grammar of Motives and A Rhetoric of Motives*, University of California Press, 1945.
- Lakoff, G., & Johnson, M. (2003). *Metaphors we live by*. 1980. Chicago: University of Chicago Press.
- McConnell, S. (2004). *Code complete*. Pearson Education.
- Pollio, H. (1986). *Practical poetry: Metaphoric thinking in science, art, literature and nearly everywhere else*. *Teaching. Learning Issues* (Fall) Knoxville, Tenn.: University of Tennessee Learning Research Center.
- Saffer, D. (2005). *The role of metaphor in interaction design* (Doctoral dissertation, Carnegie Mellon University)