Organizational Learning in Complex Adaptive Systems: An Interpretative Schema

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Simultaneously to the complexity emergence, during the last decade, organizational learning has appeared as a basic concept in organizational theory and also as a concern for organizations and managers. Despite the popularity and proliferation, the concept of organizational learning is not completely understood. In this context the present study investigates the understanding of organizational learning processes through the lenses of complexity theory.

Seeking the identification of the main articulation points between learning and complexity, a *complex adaptive system* (CAS) was chosen as the study object, because it can materialize the ideal type of both theories: an apprentice system and a complex system. This study has constructed an interpretative *schema* of learning processes in CASs. The theoretical elaboration had centered in the relation between theories of organizational learning and complexity, in which CASs are inserted. The empirical study used a higher-educational institution (HEI) as the object, understood as a CAS.

The research consisted of an exploratory qualitative case study, aiming to understand the managers' perception on the learning process at the HEI. From the depth interviews had emerged factors of learning, such as creativity, critical sense and interpersonal relationship. The interpretation of these factors, allied to the characteristics of complexity theory—dialogistic, the recursivity and the hologramatic principle [1], allowed the delimitation of analytical categories.

The final categorization and the proposal of an interpretative *schema* had originated simultaneously from the analysis of the empirical data and the reencounter with the theoretical approaches: (a) of the learning process—the stages of intuition, interpretation, integration, institutionalization; levels of individual, group and organization; and processes of feedback and feedforward [2]; (b) of the complex adaptive systems—categories of discovery, choice and action [3]; and (c) of a result that provides meaning—*sensemaking* [4].

- 1. Edgar Morin, "Ciência com Consciência", edited by Bertrand Brasil (São Paulo, SP, Brasil, 2003).
- 2. Mary Crossan, Harry Lane, and Rod White. "An Organizational Learning Framework: from Intuition to Institution," *Academy of Management Review* **24**, (1999); **3**, 522-537 (1999).
- 3. David Parker, and Ralph Stacey, "Caos, Administração e Economia: as Implicações do Pensamento Não-Linear", edited by Instituto Liberal (Rio de Janeiro, RJ, Brasil, 1995).
- 4. Karl Weick, "Sensemaking in Organizations," edited by Sage (Thousand Oaks, CA, 1995).

Zainab Jezzini Lamas obtained her B.Eng. in Chemical Engineering from Universidade Federal do Paraná, Curitiba, Pr, Brazil, and M.Sc. in Administration from UNIVALI, Biguaçu, SC, Brazil. Zainab published 1 chapter of a book, and 7 scientific papers. Her current research is in complex adaptive systems and organizational learning matters.