Misunderstandings and Misconceptions. Six Paradigms of Information.

According to some studies, more than half of IS projects fail. Empirical studies show that one of the main causes of these failures is misunderstanding users' requirements. There is a wide variety of methodological approaches addressing this problem. Among others, we can quote OO analysis and design, conceptual modeling, ontological modeling and formal methods. Most of them implicitly assume different –and in some cases contradictory— conceptions about the nature of information. Misconceptions are a sure path to misunderstandings. The viability of a methodology, a project, or an I.S., depends on the fit between the nature of the problem to solve and the assumptions made about the nature of information.

The notion of information is complex and multifaceted. In this paper, we focus on one of its most important functions, that of representing reality. Words and signs refer to concrete or abstract objects. This function coincides with the aim pursued by the cited approaches. We have found that contemporary preconceptions about the nature of this phenomenon are surprisingly similar to those held by philosophers throughout history, going back as far as the Ancient Greeks. Although Philosophy usually does not solve practical problems in the way that Science does, the former nevertheless has much to teach us, helping us avoid making the same errors and formulate problems more clearly.

The paper follows two steps. First, we draw on Philosophy to propose a map of six information paradigms, elucidating their respective stances in the process. Second, we interpret the texts of well-known authors, placing them in our proposed schema.

We hope that this clarification will prove useful to methodologists and practitioners who need to design or choose an appropriate method to address a problem in the I.S. or Knowledge Management fields, as well as to those who simply seek better understanding of other approaches.