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Chapter 2 Architecture of Information

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ABSTRACT

The information architecture as a discipline of information science has been a fertile ground for disagreement about definitions which are mostly based on practical, devoid of epistemological and scientific grounds, where each "actor" involved seeks to provide tools, techniques and concepts based on their own perspective and personal training that considers more appropriate. This paper argues that the time for a comprehensive definition is reached, based on the definition of Saul Wurman (1997) to synthesize and express in simple terms a collection of linguistic concepts that influence the perception of reality. The ways and means adopted by the discipline of information architecture in its development have in practice, limited their potential and scope. Its potential applicability to understanding the human experience in general and the phenomena of information in particular, remains to be explored. The research aims to contribute to the construction of the discipline of information architecture in terms required by Haverty (2002). The identification of formal theoretical aspects assist in the understanding of the interaction between the elements that compose it, from a systemic perspective, scientific status and key processes that define the discipline as a practice. We propose a definition based on the epistemological framework of phenomenology, by the analogy with the traditional architecture and methodology concept.

INTRODUCTION

The research aims understanding the systemic concept of Information Architecture in its epistemological, scientific and practical aspects. It is proposed to build a broader concept for the discipline to establish its thematic scope, identify its scientific status and summarize key processes that define it as a practice.

With regard to the epistemological aspects is part on the assumption that the information architecture as a field of knowledge must build its object of study through consistent theoretical concepts. As the scientific aspects highlight the interdisciplinary nature of the Information Architecture and analyses its relationship with the other three areas of knowledge, including the communication, business science and knowledge.

A generic model is proposed to systematize the concept of Information Architecture with multiple views to illustrate how the epistemological and scientific implications affected its dimension. The epistemological bases can be applied to the solution of practical problems that arise in any informational environments, i.e., the space that integrates the context, content and users / managers / decision makers. The model is generic and therefore can be applied to any information space independently support, format, content or type of information that constitute it.

FUNDAMENTAL CONCEPTS

Initial Considerations

It has always existed procedures of organization and structuring of information associated with the processes of production and conservation of energy, either naturally or spontaneously. The millennial empirical practices of production, processing, storage, distribution and use of information have become increasingly complex and required study and reflection and as such resulted in the creation of Information Science.

The technical component that has been the basis of the organization and retrieval of information should be questioned in the light of a new scientific paradigm that integrates such operations and a holistic approach which facilitates easy access to information.

To address the problem of Information Architecture is vital to understand two basic concepts: knowledge and science, as well as the origin of such concepts: the epistemology for understanding the phenomenon of knowledge, as well as the main currents of thought that influenced the science and the concepts of complexity and interdisciplinarity.

The contribution of this work is to provide a clarification of the concept of information architecture in epistemological terms and in ontological terms, in order to contribute to a robust discussion of this concept.

Epistemology

Human knowledge is the subject of study by epistemology in its different currents. According to Houaissu (2001) epistemology is the study of nature, steps and limits of human knowledge, especially the relationships that are established between the researcher and the subject, the two extremes of the cognitive process, or a philosophical discipline that studies the problems raised the relationship between the knower and the known object (Japiassu, 1996).

The French philosopher Michel Foucault (1926-1984) defines "episteme" as the paradigm according to which is structured the multiple scientific knowledge at a particular time, taking into account their specificities and different objects, certain shapes or features. Houaiss (2001) and Japiassu (1996) claim that the etymology of the term"epistemology" is derived from "speech" or "theory" (logos) about science (episteme). The Greek word episteme (science, scientific knowledge) opposes the term doxa (opinion, judgment) and the term techno (art, skill). The science according to Hirschheim (1985) can be considered as the research process that transforms doxa into episteme.

To Japiassu (1996) epistemology can be defined as the discipline that has as its subject science itself and whose interests are critical of scientific knowledge (principles, hypotheses and conclusions) in order to determine their scope and validity, as well as the study of the currents of philosophical thought.

Hessen (2000) puts the theory of knowledge in the system of philosophy:

The theory of science (...) is decomposed into formal theory (logic) doctrine and material science or theory of the material principles of human knowledge. While the logic investigates the formal principles of knowledge, forms and general laws of human thought, the theory of knowledge focuses on more general substantive assumptions of scientific knowledge.

The Socratic philosophical discussions since then occupy up the problem of knowledge. Plato can be recognized as the philosopher who initiated the epistemological debate of knowledge. 35 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

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