

Theses 4

The Platonic bodies are the substrate of this world (Heisenberg): In the end, the way to the intrinsic structures of knowledge (in the objects and subjects) is only successful by means of formal sciences: We are talking about the construction of formal concepts of the sources of the shadows and the implicit knowledge.

Buzzwords

- Mathematic and formal sciences and structures
- Models
- Logic, or the art of valid reasoning, with which we prove beliefs
- Linguistic Pragmatics, or the art of drawing inferences based on communicational principles and developed in conversations

Papers:

Radical Empiricism, Empirical Modelling and the nature of knowing

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This paper will consider the potential significance of William James's philosophic attitude of 'Radical Empiricism (RE)' [4] in relation to contemporary problems of knowledge representation in the information sciences. Current trends in computer technology and use provide a strong motivation for reviewing RE in this light.

Empirical Modelling (EM) is an approach to computer-based modelling that has been developed by Beynon, Russ and their collaborators at the University of Warwick over several years.

EM is based on the concepts of observable, dependency and agency. Observables are represented in practical model-building by variables whose values may be explicitly defined or implicitly defined as functionally dependent upon the values of other variables within a script of definitions (a 'definitive script'). Within EM, a definitive script is the most primitive representation available for what is empirically given to the human interpreter: it represents "state-as-experienced".

The paper will explore the extent to which, building on the foundation of modelling with definitive scripts, it is possible to track James's exposition of the empirical roots of knowledge, with its emphasis on the fundamental significance in sense-making of our capacity to experience conjunctive relations between things.

The paper will be in three sections. Section 1 will review Empirical Modelling (EM) principles and practice. Section 2 will discuss William James's philosophic attitude of Radical Empiricism and the parallels that may be drawn between James's account of 'pure experience' and experience of EM. Section 3 will briefly consider how James's experiential characterization of knowledge relates to contemporary concerns in computer science, with particular reference to the distinction between data, information and knowledge, and the role of tacit knowledge in human decision-making and problem-solving.

Ontologien und Topik - Systematische Aspekte einer Wissensrepräsentation

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Wissensmanagement, hier zunächst in einem engeren Sinne verstanden als Verwaltung von Wissen aus einem bestimmten Themenbereich, z.B. Wissen aus der Versandorganisation eines Handelsunternehmens, Wissen aus der Lehre und Forschung der Mathematik, Wissen aus dem Straßenverkehr u.a.m., setzt geeignete Methoden, Verfahren und Prinzipien der Wissensrepräsentation voraus, um bereits erworbenes Wissen, das nach Möglichkeit in maschinenlesbarer Form vorliegt (z.B. als HTML-Dokument, als Datenbanktabelle usw.), mit maschinellen Methoden des Suchens und Findens zugänglich zu machen. Prototypisch für diese Problemstellung der Wissensrepräsentation ist das Problem der Strukturierung des zu einem Themenbereich im World Wide Web (= WWW) verteilten Wissens.

Darstellende Untersuchung philosophischer Probleme mit Ontologien

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Eine effiziente Kommunikation zwischen zwei Akteuren, die den Austausch von Informationen beinhaltet, erfordert einen gemeinsamen Wissenshintergrund der Akteure. Mit Ontologien verfolgt die KI-Forschung seit kurzem hierzu einen formalsprachlichen Ansatz. Besonders im Rahmen des Wissensmanagements und des Semantic-Webs gewinnen Ontologien an Bedeutung. Der vorliegende Beitrag untersucht darstellend philosophische