

# Sceptical Doubts<sup>1</sup> Concerning Knowledge Capture within the Open Innovation Initiative\*

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## **Abstract**

This paper presents an epistemic framework on knowledge management, theory, capture and representation within the *Open Innovation* domain. With view to this paper's objective that is to contribute to 'knowledge capture' the effort will be directed to the development of a different basis of dialogue. Thus, we argue that 'knowledge models' based on concept maps need supplementary considerations on knowledge theory. Our purpose to sign the closeness of today's understanding about knowledge and knowledge capture mechanisms to radical empiricism foundations represented by Hume's work is the basic epistemic standing point. Furthermore, the use of Hume's words on 'sceptical doubts' is due to our purpose to underline our observation that current bibliography is occupied with an intense empiricism. This work supports the idea that the system of knowledge that is for Leibniz a system of truths should be deductively based on the division and the analysis of concepts and symbolisms.

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<sup>1</sup> Doubts is used here to underline epistemic grounds (in the way Stanford Encyclopedia of Philosophy defines doubts in philosophy, <http://plato.stanford.edu/>)

[The title of the paper purposefully uses the title of section IV: 'Sceptical Doubts Concerning the Operations of Understanding' of Hume's book 'Enquiries are concerning the Human understanding', reprinted from the posthumous edition of 1977, and edited with introduction, comparative tables of contents, and analytical index by L.A. Selby-Bigge. (The Project Gutenberg eBook of 'A Enquiry Concerning Human Understanding', by D. Hume). This is due to our purpose to sign the closeness of today's understanding about knowledge and knowledge capture mechanisms to radical empiricism foundations represented by Hume's work].

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## I Introduction

It is in our common tradition to believe that the production and the disposal of knowledge hold a supreme role in the advances of science, research, and business. With respect to the conference's framework questioning whether *Open Innovation* is defined within New Perspectives in the Context of Information and Knowledge, our sceptical doubts come to confirm the manifold nature of the theme.

Considering ideas which proceed theoretical imperatives such as “the basic economic resource is no longer capital, or natural resources, or labour, but is, and will be knowledge. This basic tenet defines today's enterprise richest resource to be the knowledge and ideas residing in the minds of a particular organization's employees, customers, and vendors” [Becerra-Fernandez 98], the understanding and the advancement of the field seems to be of great value. The citation mentioned above is exemplified by practices underlying institutional impact on the exploitation of knowledge mechanisms such as those accomplished by the *Center for Innovation and knowledge management* which assists “companies that are in business of developing knowledge management tools, such as groupware, collaborative computing, document management, [...]”.[Becerra-Fernandez 98].

Consequently, the consolidation concerning theoretical enquiries to knowledge exceeds the discussion to technological reserves. We are by no means emphatic to theories and technological reserves inconsistencies. We do not either aim to present aspects of knowledge management including the technological practicalities.

## 2 Discussion

Our enquiry focuses on knowledge theory, knowledge capture and representation. Does this imply the necessity to shift to a new paradigm in the way the scientific legacy has introduced ‘paradigm change’ to science? It is precipitate to be stated and also, beyond the scope of this work. With view to this paper's objective, that is to contribute to ‘knowledge capture’ within the *Open Innovation* domain, the effort will be directed to the development of a different basis of dialogue. Thus, we should guide our thoughts to the establishment of ideas, concepts and analysis.

For instance, ‘Knowledge models’ [Hayes 05] have been successfully mapped and have captured knowledge within institutional lives. But should we deny that ‘knowledge models’ based on concept maps need supplementary considerations on

knowledge theory? Some of them has been attempted to be framed in the following passage.

What about the incapacities of languages ‘especially the ordinary languages of common life due to its preoccupation with the sense world and its consequent vagueness on ultimate matters’ [Morrow 29]. Again, are ‘concept maps’ the ‘ultimate matters’? Here, then, ‘Knowledge models’ should be examined within the doctrine of philosophy to express the foundations of language and ontology.

Are Kaminsky’s ‘ontological commitments’ [Frye 71] enough to represent the ‘ultimate matters’? Furthermore, the ontological commitment to subject as predicate sentence structure and fundamental in languages is part of knowledge capture and representation, or business technical language does not need such commitments?

Someone might argue that empirical concepts easily extracted from knowledge business communication channels are sufficient in describing the elementary in business resources.

From the very beginning of this presentation, the use of Hume’s words on ‘sceptical doubts’ is due to our purpose to underline our observation that current bibliography is occupied with an intense empiricism that resides in the idea that knowledge lies among or/and within firms and it consolidates a practice of research concerning integrated knowledge in networks, which in sequence have been developed by knowledge capture.

Alternatively, one might draw attention to considerations on knowledge capture in more advanced environments that are getting a solid ground of references to ‘communities of practice’ and to ‘knowledge networks’ [Merali and Davies 01], and provide the certainty of knowledge theories prosperity. The use of the term ‘knowledge capture’ indicates that we have already placed in orbit the solar bodies round the observer (in opposition to the evolutionary theory of Copernicus who wanted the observer to move round the solar bodies) and obscures our view on the tradition of rationalism, on Kantian *a priori* Knowledge, on Leibnizian objective idealism, that time and space are ‘orders’ and ‘relations’, not entities or existences [Cassirer 43]. How are we going to capture and represent ‘relations’? *Semantic schemata* are the answer? However, they are not enough unless knowledge is identified within its conceptual context deriving from the historical background, the linguistic parameters, and why not, its controversies as well as its own *a priori* existence.

With respect to this principle, ontology, either Newtonian or Leibnizian [Brewster and O’Hara 04], with the former to refer to views on ontology as finding elegant

simplifying principles and the later to refer to the extreme complexity of experience, knowledge representation, has not succeeded in interpreting the actual world.

Any of these approaches might be questioned, e. g. which is the base of their arguments? In other words, where do we stand in order to build our question over knowledge capture? Our argument traces its roots back in knowledge theories. It is by no means a research proposal. It is an epistemic issue. The vehicle to this journey to knowledge theory is the tradition of the two schools, the empiricist and the rationalist. Much of Hume and Hume's belief that we expect similar effects from apparently similar causes permits us to assume that knowledge is the ultimate formula of a matter of fact, a reasoning based entirely on experience, as it is recognized in contemporary linear knowledge models. This is to say, a greater amount of cases from the actual business world will produce the effects we need for an effective response to socioeconomic changes. But we already know that so far this response hasn't been proved adequate in representing the scientific work. As far as rationalist thought is concerned, we know that Kant wrote his *Critique* mainly against Hume and Leibniz. On the other hand, rationalist thought, with Kant to write his *Critique* first in opposition to Hume and to Leibniz, for different reasons, although he has been accused [Scruton 81] as a Leibnizian or a 'Prussian Hume', in his theory of understanding turns the attention not to the origins of experience but to what lies in it. It is the analysis of concepts and the limits of understanding which build the line of his thought.

### 3 Conclusions

In order to line around the boundaries of our argument, a rough outline of the two schools of thoughts on knowledge theory was attempted above. Thus, the foundation of our proposal will be the reconciliation of the empiric supervisory knowledge with the purely conceptual. The system of knowledge that is for Leibniz a system of truths should be deductively based on the division and the analysis of concepts. The ideal of knowledge representation should be supported by the Kantian deductive method. Thus our knowledge schemata will derive from a system of truths universally accepted in the classic hierarchical representation of the scientific knowledge. We have a long way ahead to connect, however not ontologically, the two schools of thoughts, the empiricist and the rationalist, and moreover to find the structures and the functions of languages we need to serve our knowledge representation.

The reconciliation of the ‘observer’ with the ‘object’, the ‘harmony’ between the capacities of the knower and the nature of the known, the Kantian ‘transcendental idealism’, after all the existence following the *a priori* knowledge serves fundamental aspects of our proposition in this work.

Conclusively, to this extent we can answer affirmatively to the initial question if there is a new perspective in the context of information and knowledge within the *Open Innovation*. However, the new perspective should be examined by the replacement of facts by more “symbolism in thoughts” [Cassirer 43]. Now, we need more concepts and syllogism and less pragmatism. This prospect is supposed to bring in the surface the topics all along with the forms that will be addressed in a new landscape that is shaped by the needs emerging in Knowledge management, especially those regarding the unification of concepts and case-based experiences (external knowledge), and corporate fact-based knowledge (implicit knowledge).

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