Are Web ontologies formalizations of previously existing conceptualizations or an opportunity to contrive new concepts?

Are we making our way toward an experimental metaphysics or even technometaphysical inventions?

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Ontologies are nowadays an integral part of the Web, the Semantic Web in particular. The core idea behind them is to represent the meaning of published contents in a machine-readable fashion. To achieve that end, the way we make sense of published documents and information should be translated for the machine while remaining intelligible for us. Such translations are grounded on formalization: with the help of formal languages of representation, logical formulae are devised that guarantee the correspondence between the syntax used by machines and the semantics we ascribe to it since the formality of these languages rest on the alignment between syntax and semantics.

In order for such languages to become fully operational, basic syntactical structures (connectors for instance) are required as well as a vocabulary. While these syntactical structures are more or less shared by all formalisation languages, vocabularies aim at catching what is specific to a given area or piece of reality. Ontologies are then tantamount to the different vocabularies formulated through these syntactical structures. They’re, practically speaking, taxonomies that formalize in an orderly and hierarchical way the notions of a given domain.

Ontologies are therefore one of the conditions of possibility of a Semantic Web. Now this modernistic technological awareness traces back in time, without always acknowledging it, to a most classical problem – and its known shortcomings. Indeed, the issue at stake is whether it is possible to single out basic notions for each domain of knowledge and whether some notions are transversal to all domains. It stems from this vision that the different domains would depend on a single universal ontology, every one of them adding itself to this shared universal ontology by complementing the others.

Are there notions that perfectly match the ontological make-up of the world that all and every domain of reality should help to clarify and specify without it being ever questioned? Put in these terms, the question amounts to the current metaphysical programme of the contemporary analytical movement. Yet, on the other side of the metaphysical coin one finds the phenomenological or gnoseological issue, no longer
questioning the structure of the world but of thought itself. Are there generic and universal forms of thought that hold for any conceivable content? Is there a formal ontology that characterizes the various possible guises of human thought that regional theories should instantiate? One may here recognize the questions raised by Husserl’s project of a formal ontology.

These questions that used to be purely theoretical ones from the point of view of philosophy and logic are now raised from a technical and practical point of view. Would that make the Web the empirical and experimental framework where they can only be raised and analyzed? Of course, this would also constitute a considerable shift since the underlying hypothesis behind this kind of metaphysical questions is precisely the unempirical nature of the answer it traditionally calls for. By contrast, if our metaphysics is neither no longer independent nor autonomous from its tools, the Web may open up the possibility to build new ways of characterizing both the world and thought.

We’re thus led to imagine an experimental metaphysics, moulded by experience, contingent inasmuch as it is dependant on the tools required for its study. Beyond the apparent contradiction of such a project, the scope of metaphysics being on principle outside of experience, it raises the possibility to contrive local metaphysics and ontologies corresponding to the necessary laws of a given technical environment. In other words, a techno-metaphysics able to conciliate the underlying order and structure of thought as well as the world and, at the same time, the fact that our representations and this world are fundamentally dependant on the technology that shape them.